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DR. E. S. HULL,
WILLIAM MUIR,
CAREW SANDERS,
FRANCIS GUIWITS.

COLMAN'S RURAL WORLD,

Is devoted to the promotion of the
AGRICULTURAL, HORTICULTURAL AND STOCK
INTERESTS OF THE VALLEY OF THE MISSISSIPPI.
It is issued on the 1st and 15th of every month, in
quarto form, each number containing 16 pages, mak-
ing a volume of 384 pages yearly. Terms—\$2.00 per
annum in advance; Four copies, \$6; Ten copies \$15,
and a Premium of Five Concord Grape Vines to any
one sending the names of Four subscribers and \$6;
and Fifteen Concord Grape Vines to any one sending
the names of Ten Subscribers and \$15.

ADVERTISING TERMS.

A few appropriate advertisements will be inserted
in the "Rural World and Valley Farmer," at the
following rates: One square (being ten lines of this
type or an inch in depth), each insertion \$2; One
column, one insertion, \$15; and \$10 for every addi-
tional insertion. One-half column, one insertion, \$8;
two insertions, \$15, and \$6 for every additional in-
sertion. These rates will be strictly adhered to.

BLOOD WILL TELL.

This is so the world over—in man, in the
brute, and even in the sap of vegetables. Blood
will tell. It makes not only the breed, but the
animal. It is therefore in the hands of the
farmer to direct his stock—of all kinds. He
may grow thin necks, and thick fleeces—good
layers, and easy-fattening porkers; his horses
may have mettle or otherwise. He may direct
the current towards a good dairy, good mutton,
or fine wool. He has everything in his hands
to a greater or less degree. If not, he is not fit
to be a farmer. He must have some advantages
of this kind to begin with. Carelessness is in-
excusable; it is greatly injurious. The earth
will not be hurt, and not resent it. So with
stock. Bad blood will recoil on the owner—
and in this race of successful high breeding of
cattle, he will stand no chance.

If butter and milk are desired, secure the
Ayrshire, which was bred (in England) for this
purpose, and for a long time, till the object of
a good dairy cow was secured. We have it
now ready to hand to get; not always so ready
of access—but it may be obtained; and when

once obtained, no more trouble after that, as
the machinery will work so much the better
when stimulated by the good qualities which
develop themselves under the eye of the owner.
No trouble, no labor, where there is inclination,
encouragement. It is on this principle that
our great stock breeders have become what
they are—intending (most of them) in the start,
only improvement.

The age, the long effort of man, has prepared
just what we want—not only improvement, but
almost perfection. We have but to select.
And though difficult in some cases, still the
thing can be obtained, and will be by the en-
terprising. It is these that have the improved
breeds, or are in the way of getting them.
Where there is a will there is a way.

We have mentioned the Ayrshire for the
dairy. For richness of milk, and good quality
of butter (flavor and grain), nothing is equal
to the little Alderney. The value of a dairy is
always enhanced where the blood of the breed
is perceptible, and it exists in many localities
of the country among the native stock, giving
the saving eminence to that breed.

An infusion of this blood (the Alderney) is
perhaps preferable to the Ayrshire—though we
have seen noted results of the latter. Where
the richness of the Alderney can be joined to
the abundance of the Ayrshire, the success is
often complete. We know of such instances.
Such a cow would be best of all as a single
cow, where both richness and abundance of
milk are required.

Where cows are kept in a miscellaneous
way—some for milk, others for beef, &c., the
American Short-horn takes the precedence. It
affords all extensively, especially beef, and of a
good quality.

Among sheep there is a wide field of choice.
The Long-wools are desired generally by those
who want mutton—and the carcass affords the
most abundant. If quality alone is sought for
—quality of mutton—the South-downs are pre-
eminently the sheep—and they have a fair
carcass and a good fleece. For wool, how-
ever, the Merinoes carry the palm. Then
there are crosses—the Shropshire, a strain of
the Leicester with the Down; the Hereford-

shire, a cross of the Cotswold with the Leice-
ster. These last have taken high premiums in
Europe. It is in consequence more of the thor-
ough care bestowed upon them, than in the
cross. They are, however, an estimable breed.
They are good breeders, good mothers—quali-
ties they inherited. All the good qualities of
the race (of sheep) have not yet been combined
in one breed, in the perfection they exist in
each. The different breeds are interesting on-
ly as affording a chance for selection—a selec-
tion to meet particular wants.

Among swine, there is much inquiry for the
Chester White pigs—very fine and valuable,
as are also the Suffolk and the Essex. The
latter is probably at the head of the swine race,
in the various qualities that recommend themselves
—in the fine distribution of lean and fat, and
in the easy-fattening principle—two of the main
points. The color (black) is an objection to
some, but affects not the meat. The size is
fair, weighing 200 lbs. at six months; double
that at maturity.

For a fatter breed—more fat in proportion to
lean—for easy-fattening, the Suffolk is hardly
surpassed. It is a beautiful and desirable
breed.

Our article is too long, or we should mention
the various breeds of poultry. We will say,
get the Brahma for winter laying; the Spanish
for general laying, large eggs, and fine appear-
ance. The Spangles are also good layers. So
are the Chittagong and Dorking. Some pre-
fer the Bolton Gray. We mention them as all
good breeds to be selected from. The Black
Spanish and Brahma, or a cross between them,
are our favorites for the year's laying. They
never disappoint; only give good treatment.

Secure the blood (of all kinds of stock) in the
start, and thus get the benefit at once—not waste
years in loss and labor, when a little trouble
and expense in the start will correct all, and
improve not only the pocket but the man. The
general influences of success and beauty have
this effect.

THE RED ANT.—Where they are troublesome,
it is said that sage leaves fresh picked, will keep
them away if scattered in places you wish to
protect.

[Written for Colman's Rural World.]
New Varieties of the Potato.

We are among those who are cautious about the purchase and trial of all the new varieties of fruits, flowers or vegetables, as they make their appearance in rapid succession from year to year. We are aware that many highly lauded new things turn out to be magnificent humbugs, which a few seasons' trial proves, and they drop into the obscurity they merit; we would not, if we could, invest money and time in every new thing that is sent out in different parts of our widely extended country each year, but would weigh all the testimony, *pro and con*, and examine the sources from which they may emanate, and judge and act accordingly—as a general thing preferring to wait a season or two till others have tested them, or their merits are more fully established by others than the fathers or originators of them. On the other hand, we are not of those who believe the *ne plus ultra* in anything has been reached, or that improvement can no farther go; but, on the contrary, think that improvement and advancement are the order of the day, and that there is nothing which comes under the manipulating hands of man but what is susceptible of improvement.

Then there are some things that come to us so well authenticated from so many sources, that he who would not touch them for fear of being cheated, or that he wants no better than he already has, undoubtedly stands in his own light, and deserves the appellation of "Old Fogey."

Such, for instance, is the case with the Tilden Tomato, the Philadelphia Raspberry, the Iona Grape, and so on.

To the potato grower—especially the market grower—whether for early market, for general productiveness, or for quality—it is important, as in all other cases, to have the very best varieties, if there is one better than another.—There are several new varieties which have been tried for a number of seasons at the East and by a number of disinterested persons, from all of which, as well as from their origin, appear to give promise of proving valuable and decided acquisitions, that would seem to justify any person having the means and desire for better than they have, to give them a fair trial.

We allude to the seedlings of the late Chauncey E. Goodrich, of Utica, N.Y. He devoted the best years of a valuable life to the study, culture and improvement of the potato, mainly directed to the prevention of the rot, by going back to the original wild stock, and improving them by generations of seedlings. He raised quite a number of varieties, which he considered worthy of dissemination, some of which by subsequent trial have proved very valuable, being very productive, hardy and free from rot, and of greater or less excellence in quality.

The varieties which have stood the test, and prove the most valuable, are the Garnet Chili, Gleason, Calico, Cuzco, Harrison and Early Goodrich—the latter said, by some, to be the earliest as well as one of the most productive varieties in cultivation, yielding 300 to 350

bushels per acre. The Cuzco is said to be also of good size and flavor and enormously productive—800 to 400 bushels per acre. And the others have all claims to public attention.

Mr. A. W. Harrison, of Philadelphia, on whom the mantle of Mr. Goodrich appears to have worthily fallen, has made some careful experiments in potato culture the last few years, and whose accounts have attracted a good deal of attention this last season, sets down the Harrison and Early Goodrich as the best types of their race. There are also a number of other new varieties at the East, which, so far as we know, have been little heard of at the West, which will, some of them, probably prove valuable, and are worthy of a trial. These are the Monitor, Early Stevens, Extra Early White, Delmahoy, Snowball, New White Peach Blow, and others. We give no description of them, merely calling the attention of those who are on the look out for new and improved kinds of this invaluable esculent.

C. S.

[Written for Colman's Rural World.]
Paris Universal Exposition.

Public attention requires to be called to this most important event which is to take place next year, and as the time in which articles can be entered for exhibition is very short, vigorous and immediate action requires to be taken.

The subject is already familiar to many who will read this, but still there are many who know nothing of it, and yet a greater number who have never given it more than a passing thought.

This Exposition has the best title to be regarded as *universal* of any of its predecessors. The French Emperor and Government are doing everything that can be done to make it representative of every branch of Industrial Art and Natural Resource. Its arrangements are all undertaken through the several governments alone, which will prevent its being perverted to the furtherance of mere individual and selfish objects. Although there still is a doubt as to the extent to which our General Government will participate in the enterprise, enough is known to call forth the determined action of our State Government, public bodies, and private individuals.

The position which our State may hold in this connection, can be made a proud one indeed. Far removed from the seaboard, in the centre of a yet new country, but just emerging from a state of active war, all the elements of its labor system suddenly changed, the entire direction, methods and objects of its production, re-organized, and the experiment of the effect of an immense taxation in the place of recent almost entire immunity, will teach a lesson upon the recuperative power, inhering in a free people, not to be lost, and may form one of the articles exposed to the wondering minds of European Nations of the *greatest intrinsic value* to them.

Again the position that is occupied by Missouri, as an Agricultural, Mining and Manufacturing State, will become better understood by the world, by the actual samples of her wealth in these articles through this Exposition, than by any other means known. Commencing her

existence as a State in 1821—Missouri ranks among her sister states in 1860.

Second in the production of Indian corn.
 Sixth in the Manufactures of Iron.
 Seventh in the production of Live Stock.
 Seventh in the production of Tobacco.
 Eighth in the production of Lumber.
 Eighth in population.

Among twenty-three of the oldest States in 1864, Missouri ranks:

Fifth in the production of Tobacco.
 Fifth in the Manufacture of Tobacco.
 Fifth in the Manufacture of Fermented Liquors.
 Eighth in general Manufactures.

And is she to stand unrepresented in the world, and before "An International Jury * * * appointed to award the prizes" (Art. 62, General Regulations.)

It is late in the day to begin, but better late than never. If our State cannot be admitted to a place within the Palace (for want of time to make applications for space) it can be in an external structure which *must* be erected in the Park for the full display of American products.

We will not in this indicate any course to be pursued, but only call for prompt, full, liberal and widely extended action, so as to ensure as complete a representation of the capacities and resources of our State as circumstances will admit.

W. M.

Since writing the above, Congress has, by "Joint Resolution accepted the invitation of the French Government to take part in this great Exposition, and applications for space in the Mechanical and Artistic Departments have been freely made, but there are various branches of Agricultural Industry, which should be represented."

(Circular of Com. of Department of Agriculture.)

♦♦♦♦♦
CARROTS A SURE CROP.

Carrots require rich soil, depth of mellowness and moisture. Then if the weeds are kept out, and the carrots well thinned—say to eight inches in the row—there will be no difficulty. It is all bosh about the varieties of soil; you want a *rich* soil, and that mellow, so that the root can work in the ground, and retain its moisture and breathing. It matters little about the season. A wet season will but make the carrot grow the more plentiful, if possible; the porosity of the soil readily carrying off the surplus water. In a drouth, the same principle (of mellowness) will keep the moisture, and all the more air and heat—the latter of which is needed late in the season—the best time for the growth of this vegetable. The same soil, manured, will do for a succession of crops. Give space, richness, and good cultivation—and all discouragements will be overcome, and a good crop crop out.

LICE ON CATTLE.—W. G. Wardenhall, Jefferson county, Pa., says, that "knowing larksur seed would destroy lice on human beings, he collected a quart of seed, ground it fine, soaked it a week in one gallon of strong vinegar, and then applied it with a sponge to all parts of the animals; has never seen a louse or nit since."

T. F. Haynes, Hartford county, Ct., writes to the *Agriculturist*:—"I keep lice off my cattle by keeping sulphur and salt in winter where they can lick it when they choose; my cattle have had none since I practiced this."

THE HORSE.

Good food, pure air, careful grooming, temperate climate, and labor graduated upon condition, have effected a reform. Clean, light, well-ventilated stables furnish fresh air to purify the blood, and are found to prevent the disease of glanders, farcy, swelled legs, sore throat and bad eyes; diseases that have destroyed whole regiments of horses in the army. This mortality could have been prevented by wholesome food, pure air, warmth and cleanliness. This has been proved by the example of efficient commanders who have reformed the filthy inclosures, exacted obedience to faithful grooming and careful training, which has prevented much wanton destruction in the cavalry, and saved a vast amount of public expense.

Horses that labor require grain apportioned out at regular intervals—about three times per day for slow work and five times for fast work. They require a thorough dressing at least once a day, and should be cleaned and rubbed dry after severe labor. The comb and brush remove the dirt from the roots of the hair, and a linen cloth or wisp of straw polishes the coat and gives it a fine, silky appearance. All tend to open the pores of the skin and keep up a healthy action of insensible perspiration, which fits the horse to perform more labor without injury. Hand-rubbing the legs from the knee and hock downwards, stimulates the arterial circulation, which is essential to great speed. Grooming improves the health, increases the vigor of action, cleans the skin of all impurities, which become a self-generating oil-conductor, that moistens the hair and gives it a healthy, glossy appearance. The horse should be fed from two to four hours before being put to severe labor. Racers are allowed no hay on the day of racing until their labors are over. It prevents free respiration and loads them down with useless weight. They need free action. Digestion ceases in nervous excitement. The overtasked horse should be cooled off by walking so that the heart and nerves may cool gradually with the body. They have been raised to the highest tension by severe exertions; they should be brought to the mean temperature by moderate exercise. Flesh worked on to a horse gives him a preternatural power, a more solid and permanent condition, than flesh put on in the stable. Young colts and working horses must be kept in good condition. It is a passport to favor with the buyer, that the horse has two years of good keeping in him. "Starvation checks the growth and destroys the shape; horses that have been ill-fed when young are almost invariably small, long-legged, light-carcassed, and narrow-chested." They may be over-fed. Those with deep chests and broad loins will over-gorge themselves with hard food, and cause their legs to stalk, or founder the chest. High feed, without sufficient exercise, loads the system down with fat, which fevers up the body and pounds out the legs. Greedy eaters must be stinted to a moderate supply of grain. It will improve their action, health and condition. No wild horse, or tame horse in his natural state, can last a single day with one trained or seasoned—fitted up to the staying point. Drawing or sweating the horse by active exercise is one of the agents of conditioning him to endure labor. It lightens the carcass, and improves the wind for long road-work. Taking away the surplus fat gives the lungs more room to expand, and blood-vessels and air-tubes have ample space for active and free circulation. These are the engines that propel the muscles. The horse in condition has the ability to breathe rapid, and can travel fast. It increases the pulsations of the heart which shows the active circulation of the blood. The more air they consume, the longer they last. The horse that has large nostrils, chest, and wind-pipe has the best wind. Their wind will out-last their legs. Training must be apportioned out according to the constitution. The robust horse may require a sweat

once a week, while the delicate, nervous animal may not require any drawing. The high-spirited horse will not stand fast work without much repose; constant exertion will impair their condition. Condition is preserved by health, food and exercise. The want of condition may destroy a good horse in a single journey. Founder, sprains, puffs and spavins are the consequences of over-tasking an unseasoned horse. He must have some previous preparation corresponding to the labor required. No horse can endure ten miles an hour on the road or race-course, for any length of time, without being fitted for the task. He must have the vital action, clear, and the physical condition firm, to stand the wear and tear of long drives.

Early maturity gives value to the horse. The colt that matures at three years old is worth twice as much as the animal that matures at six. If the former cost fifty dollars to raise, the latter would cost one hundred dollars. One is no more subject to premature decay than the other, provided they are broken upon the principle of exercise and weight for age. The ability to perform young depends upon the constitution. The same cause that enables the colt to perform service will operate upon the old horse. One of the highest encomiums passed upon the horse is that he lasts all day—good on the last quarter! exclaims his eulogist. If he crows out at noon he would amount to but half a horse. Endurance is one of the attributes of a sovereign will. It measures distance as strength measures weight. The more power that can be crowded into one horse, the less in number will be required to do the same business. The saving power of machinery diminishes the cost of production. The saving of labor by horse-power increases the means of production.—[Wilkes' Spirit.

KILNS FOR BURNING LIME.

There are various methods of constructing these. But the cheapest plan, where it is practicable, is that adopted by the commercial lime burners along the Mississippi river. Their method is as follows: A suitable place at the edge of the river or creek bank, convenient to the limestone, is selected, where the height of the bank is ten or fifteen feet. The face of the bank is cut down until it is smooth and firm. A hole for the kiln is then dug upon the bank, just so far back as to leave the arch four feet deep from the front to the nearest side of the kiln. The size is usually about eleven feet in diameter at the top; thirteen feet at the widest place in the middle, and about ten feet at the bottom; and the depth, say thirteen feet, more or less, according to the height of the bank. If the earth is clay, no wall is required. The arch is cut through from the front, and is about five feet high and about three and a half feet wide. This, after it has been used a while and is burned out, is laid up with masonry even with the inside of the kiln; below this height is an ash pit twelve inches deep and eighteen inches wide. Two long stones extend across the front of the arch into the wall on each side, which are several inches thick and are placed two or three inches apart, the upper one being two and a half feet below the top of the arch.

Filling the Kiln and Burning.—The stone is broken into pieces from the size of a man's fist to twelve or fifteen inches long and from two to four inches thick and not exceeding double this in width. At the bottom, the small slab stone, not exceeding eight inches wide, are laid up perpendicularly around the outside of the kiln,

larger pieces being used as the width of the kiln increases upwards; as this wall is carried up, the centre of the kiln is built up, leaving a flue twelve or fifteen inches wide between the centre of the outside wall. This middle wall is brought forward to a point in front until it extends on a line even with the inner face of the fire-place or arch, that is, making the centre twelve or fourteen inches more in diameter from front to rear of the kiln than it is wide, which gives a uniform width to the flue all around. The flue is carried up the same width to the top of the arch, where it terminates by laying stones across that will reach from the outside to the centre wall. In laying up the wall and filling the kiln, care should be taken to place the largest stones nearest the fire. All the stone should be laid up loosely, so that the flames will penetrate through them. After the arch and flues are covered, the stones may be thrown in promiscuously, reserving the smallest pieces for the top. The wood may now be placed in the arch and the fire kindled and gradually increased. The time required to complete the burning depends somewhat upon the kind of stone—usually about three or four days and nights, requiring a little experience to determine definitely. When the fire has done its office, the smoke ceases to appear at the top, and the flame rises through the interstices at the top. One or two fair trials will teach any intelligent man how to do the work in a proper manner.

A kiln of the dimensions we have given, will require the consumption of about 25 cords of wood, and will yield about 900 bushels of lime.

Where the object is to burn only for farm use, kilns of smaller dimensions, to suit the exact wants, may be made. But the size and proportions we have given are found successful and most economical.

Kilns made in this way, in good clay, will last for years, with a little mending at the top, where the outside of the wall is sometimes scaled off by the frost and rain. This is done by placing pieces of plank up endwise around the kiln when it is filled, and pounding soft clay firmly around between them and the old wall. If the earth is sandy, the sides of the kiln must be walled up with fire-proof stone or brick.

Where a bank cannot be found, kilns are made above ground, and walled up much after the form here given.

Perpetual Kilns, or kilns in which the process of burning is continued for months, by adding stone and coal at the top and drawing out the lime at the bottom without letting the fire go out, are in use in some parts of the country. But where wood is abundant and the means of constructing the common kilns are so easily available, as in the West generally, it will hardly be deemed necessary to describe their mode of management.

An experienced dairyman prefers to have cows come in early, so as to have them twice fresh milked—once when they come in, and again when they go to grass.

A cow should always be milked before she is fed, as her attention then is given to the milking, and her milk will come readily.

[Written for Colman's Rural World.]

Spanish Merino vs. Cotswold Sheep.

In the *Rural World* of 1st inst., I see a "Mr. Shepherd" takes exception to an article I sent you from the *Vermont Record*. I made no remarks myself about the coarse woolled sheep, but considered the article one calculated to work good in our country. "Mr. Shepherd" quotes sales of sheep by the Messrs. Ballingers, but forgets to say they were Merinos. We will admit, for mutton purposes, that one Cotswold sheep is worth more than one Spanish Merino and perhaps too his hair (could not call it wool conscientiously) will bring nearly as much as the wool of the Merino. I believe every stock raiser knows that the larger and coarser the animal, of whatever kind, the more food it requires to maintain it; and in regard to sheep, I believe all sheep men, setting aside quietness, agree that where you can pasture and feed, say fifty Cotswolds, you can keep equally as well one hundred and fifty Spanish Merinos.

Three Merinos will make as much mutton certainly as one Cotswold, and one Merino's fleece will sell for as much or more than one Cotswold's, leaving two fleeces in favor of the Merino stock. If, as some say, they raise sheep more for mutton than wool, I think they are mistaken both as to quantity and quality. I know how good mutton the Merino makes, from experience, but do not of the Cotswold; but suppose that it holds the same proportion as coarse built cattle do to fine formed Devons, or large coarse made hogs to the fine boned Chester White or the Suffolk: therefore I should suppose the mutton of the Merino superior. Merino mutton is certainly good enough for any one. I noticed in the north part of Vermont, where they raise Cotswolds, that the stone walls had fences on top of them, and rail and board fences were even higher than with us, and some of the sheep wore a machine on the neck that the "Yankees" call a "poke." It looked to me as if they were inclined to jump their high fences. In middle and southern Vermont, where all the sheep are Merinos, the fences are not half so high. In one instance I found the lambs separated from the ewes that morning, and the bucks in another pasture. The fences between the pastures were in no place over three feet high, and yet the owner assured me there was no fear of their coming together. That flock was of same grade and near George Campbell's flock. Five ordinary rails high, will keep my flock in any pasture. Certainly the difference in fences is in favor of the Merinos in our prairie country. True I am a Vermonter, and I am not sorry to say so; but I came to Illinois in 1819, and returned to Vermont on a visit in 1864; was there seven weeks, saw all the sheep I could, and gathered as much information as possible. I have seen our country, from wild timber and prairie, nearly all put into pasture and cultivation.—Sometime I may furnish some further light in favor of the Merino. I keep the figures of my stock.

SPANISH MERINO.

[Let us have more light, Brother "Spanish Merino."—*Ed. Rural World*.]

Neighborhood Cheese Factories.

These are being largely organized in the eastern states. Mr. X. A. Willard of Utica, N. Y., gives the following information regarding them, in the *Country Gentleman*: "It is not considered profitable to carry on a cheese factory when the milk received is less than from 300 cows. The help, and general expense account, would be nearly the same for a small factory as for one receiving the milk of 500 cows. For a small factory, say of 300 cows, a building 25 feet by 50 feet, two stories, would perhaps be large enough—the lower story to be divided off into manufacturing department and press room, and the upper story, the dry-house for storing cheese. Ralph & Co. of Utica, N. Y., have a very good vat and heater, which serves a good purpose for cheese-making, and could be fitted up at less than half the expense of steam apparatus. If butter was to be made in connection with cheese, a spring-room should be connected with the main structure, with vats sunk even with the floor, in size about 9 feet by 12 feet, 2 feet deep, and arranged so as to be filled with water—the water constantly flowing in and out. The temperature of the water should not be above 56 degrees. Long tin pails, 20 inches deep and 8 inches in diameter, have been found of desirable shape to receive the milk, which on being filled within 4 inches of the top, are immediately plunged in the water. The milk in the pails should never be higher than the flow of water. Adjoining the main structure also, and running back forming an L, should be erected a churn-room, cellar, and ice-house. The churn-room may be 20 feet by 30 feet, and leading out of it a broad alley, on one side of which is the ice-house. This broad alley may be constructed large enough to serve as a cellar or place for storing butter and cream in summer, so arranged in connection with the ice-house that it may always be kept cool. A building or buildings like those above described, cost here in the dairy region, when properly fitted up with apparatus and in running order, about \$3,000.

The labor required to keep a factory of this kind in running order, could not well be less than three hands, in addition to a good superintendent. We hardly think any one North would be willing to invest the amount of capital required for a factory, without the prospect of a large number of cows from which milk was to be received, together with good assurance of ample remuneration. We should advise our correspondent to join with his neighbors, send here for a carpenter who understands cheese factory buildings, and erect a factory on the joint stock principle. After it is erected, employ a first-rate superintendent from the dairy region, who is well posted in all that pertains to butter and cheese-making, and then there will be no doubt of its proving a success. The general plan North in the management of cheese factories is to form a company to build and fit up a factory. The company then employ a superintendent to manufacture the cheese, paying him a salary or certain per centage on the product manufactured. Patrons, or those delivering milk at the factory, are charged from 1½c. to 2c. per pound for making up milk into cheese. We suppose a good superintendent could be employed at a salary of about \$800 for the season, including board. This would be for his own services, and would not include any expense on his part for other labor. A first rate manufacturer or superintendent could doubtless get along in a small factory by taking raw hands, and directing their operations at the factory."

A correspondent of the *Country Gentleman* recommends alum water for weak eyes in horses. Blow with a quill into the eye.

GREASING BOOTS.

Never grease boots and set them away, especially for any length of time. It will mould and rot them—it will do it more effectually if you put them in a damp place.

Never grease with hard grease, as it will fill the pores of the leather, and soon rot and kill it. The life and elasticity of leather must be preserved; otherwise there is soon an end to it. The grain once affected, the leather will crack.

Use fluid grease or oil. That will have a circulation in the leather, and keep open the pores; but do not let these pores get filled with other matter, which they will if too long neglected.—The oil should be applied, rather sparingly, whenever the leather begins to show a lack of pliability, or before. At stated times apply a little oil, according to the treatment of the boots. If used much in the wet, especially in the snow, grease often, twice and thrice a week. If worn indoors, once in three or four weeks will do. If worn in rubbers, but little oil is necessary—a few greasings during the winter is all that is needed.

This is our plan with calf leather. More oil is required for kip or cow-hide. If leather is neglected, it will become stubborn and hard—an inconvenience to the feet—but good so long as it lasts against the wet; but the leather is dead, and will soon give out.

Oil, when kept constantly in boots, will also in a measure overcome the effects of lime and the burnt action to which the leather was subjected in the vats.

Lard may be used in the summer; but we still prefer oil, even if it has to be applied the oftener, which is the case when compared with lard. Tallow should never be applied—and we don't approve of lamp-black. Neat's-foot oil recommends itself highly—but there is nothing so good as lamp oil. It will keep leather in that pliable condition which disposes it to shrink—a good sign, showing the life of the leather is still there, its grain unharmed.—Shrinking leather is always good, so long as it returns that property. All boots should have the "stretch" taken out (not overstrained) when made. There will then (in good leather) be a tendency to shrinking, or at least a retention of its place. Our experience does not extend to the greasing of the soles.

Why Will Milk Not Make Butter?

ED. RURAL WORLD: Can you tell me why we cannot make butter from one of the best cows in the country. She is ten years old; we feed her on Hungarian hay and corn meal slop; she is in fine order. We have tried for four weeks to churn butter, but have failed; we have churned from four to six hours, and have failed; we have tried cold and hot water. The cream, after churning two or three hours, looks very much like the whites of eggs well beaten, and not the least appearance of butter. She gives about two and a half gallons of milk per day. Had a calf last June. If you can throw any light on the above, you will confer a favor on some of your subscribers. There are other cases in the neighborhood.

Paris, Mo.

JOHN N. PARSONS.

CULTURE OF ARTICHOKES.

There are several varieties of this plant; but that known as the Jerusalem Artichoke (*Helianthus tuberosus*) is considered the best. On suitable soil these may be grown to great advantage. The yield, ordinarily, is about three times greater than that of the Irish potato, and to this immediate climate it is better adapted than the potato. We have known of instances where the yield was from 1,000 to 1,200 bushels per acre. They are eaten by cattle, horses, sheep and hogs; but the labor of digging is considerably greater than that of the potato. Dr. Sam'l D. Martin, of Clark county, Ky., some years ago, planted his apple orchard with the artichoke, having two objects in view—first, to produce feed for his swine; and second, that the roots might afford an inducement to his hogs to cultivate the orchard. He succeeded most admirably in both of these objects. The roots yielded an abundant crop. By digging and estimating a certain quantity, the yield per acre was enormous, the precise quantity we do not now recollect, but they served as food for his hogs for a long time after maturity, and in rooting for them, the hogs gave a more thorough cultivation to the orchard than could have been secured by any other means, and without injury to the roots of the trees.

The artichoke is one of the plants, found by Boussegault, to draw its nitrogen almost entirely from the air; hence, it is one of the best crops to turn under before the tubers are formed, for the amelioration of the soil; although this advantage is not entirely lost when the crop is allowed to mature and be dug by the hogs. Hogs prefer the roots when boiled, but the advantages of this would not equal the labor of digging.

The roots should be planted as early in the spring as the work can be well done, much as the Irish potato is planted—laying off the rows about four feet each way, and dropping one tuber in each hill and cultivating in the ordinary way. A light soil suits this crop best, but it will grow on almost any soil. We do not know where the seed (tubers) can be had, but wherever it has been introduced, unless special care has been taken to exterminate it, they may generally be found in the fence corners.

HARROWING WHEAT.

It is the custom with many farmers to sow clover or grass seed in the Spring upon their winter grain. Before sowing the seed, if an ordinary harrow with sharp teeth is run over the wheat or other grain, the crop will be materially improved by it, and the ground at the same time will be put in a much better condition to receive the clover seed than if sown without harrowing. Some might apprehend injury to the wheat by giving it a thorough tearing with the harrow. But select a time as early in the Spring as the ground is just dry enough to work lively, and a good harrowing will prove as great a benefit to the crop as a thorough plowing or cultivating will to a crop of growing corn. If you are afraid to make the experiment on a hundred acres, try it on ten, or even one acre, and report to us and the world the result.

Whether grass seed is to be sown or not, the harrowing will pay many times the cost of the operation. If the work should happen to be

done just before a shower of rain the effect is readily marked. We have tried it and know.

Grain on light, sandy land, will be improved by running a roller over it instead of the harrow.

Italian, or Ligurian Bees.

After an experience of five seasons with these Bees, the receipt of numerous letters from purchasers, and the testimony furnished to our Agricultural Journals by many of our best beekeepers, I am satisfied of the correctness of the European verdict that the Italian bees are far superior to the black variety. The following are some of the principal points of difference between them and our common bees.

1. The Italian Queens are more prolific, and keep their brood more compactly in the combs than black Queens; and their swarms are usually earlier and larger than those from black colonies. From their bright colors these Queens are much more easily found on the combs than the common Queens.

2. The Italian Bees, when forage is abundant, are far less disposed to rob than the common kind. The importance of this peculiarity, in an apiary where moveable comb hives are used, will be readily appreciated.

3. The Italian Bees defend their hives against robber bees, whether Black or Italian, much more successfully than the Black Bees. In opening a large number of full stocks and nuclei last season from April till November, I did not lose a single colony from robbery. The experience of Dzierzon the great German Apiarian, on this point agrees fully with my own.

4. The Italian Bees protect their combs from the ravages of the Bee-Moth much more effectually than the Black Bees.

5. The Italian Bees cling much more tenaciously to their combs than the common bees, so that in handling the combs the young bees which cannot fly, do not, like black ones, drop on the ground or upon the person of the operator.

6. The Italian Bees will work freely upon the second or seed crop of red clover. In regions where late Summer or Fall forage is scarce, this will often make the difference between a good profit and a heavy loss.

7. The pure Italian bees are much more peaceable than the Black Bees. The assertion, however, which has been made by some, that they will not sting, is not true; and the crosses between them and the Black Bees are often much more difficult to subdue if once enraged, than the Black Bees.

8. The Italian Bees gather much larger stores of honey than the Black Bees. Dzierzon, the great German bee-keeper, says that the profits of his apiary have been doubled since their introduction, and I have received numerous statements, showing that colonies of these bees have in this country secured a generous living, and often a surplus, in seasons when common stocks have not obtained a sufficient supply for wintering.

The first cross between the Italian and Black races, is far superior to the Black Bees, which are improved by any mixture of Italian blood.

L. L. LANGSTROTH.

TESTS OF ITALIAN QUEENS.—The color of the Queens and Drones raised from pure mothers, varies greatly, but all their worker progeny shows distinctly the three yellow bands or rings. Queens reared from them in good colonies, when forage is abundant, are generally handsome; while those reared from impure mothers are very rarely handsomely colored, even when the worker progeny of such Queens appear to be pure.—[Langstroth.]

ERRATUM.

In No. 4 Rural World Feb. 15, page 51, second column, 37th line from the top, read "Davis" in the place of Smith.

BREEDING FAST TROTTERS.

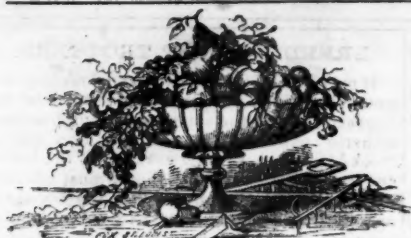
It may be said that trotting and breeding the trotter have been permanently instituted in the Northern States, the same as running has been hitherto patronised in the Southern States. Stock-breeding is so interwoven with the habits and customs of our people, that it must advance with the genius of man and the progress of the age, until we can calculate with a reasonable certainty upon the produce of our stables. Like other natural laws, it may be reduced to a science. When the breeder is governed by the immutable law of hereditary descent, he must secure uniformity in kind. Dexter, the champion under saddle and hero over Time cost no more to raise than a French pony. Anybody can produce the type of Dexter, with as good blood coursing in his veins; it follows, as the effect of a cause, that he would be equal in other respects. Speed and stoutness, like any other attribute, will re-produce in the offspring. "Like produces like," is an axiom as old as the hills. Diomed begot his equal in Sir Archy, Duroc in Eclipse, Boston in Lexington, and Lexington in Norfolk. It has been asserted with a good deal of pertinacity, that trotting is an exception to the rule; that it is in an artificial gait, and does not descend as a legitimate heritage to the progeny; that horses trot in all forms, without genealogy or hereditary distinction. The exception is not well taken. The mixing of breeds confounds the pedigree, and we are not able to give credit where it belongs. There may be chance trotters that have no family heritage to fall back upon, that do not, and of right ought not to be expected to perpetuate their trotting action to their colts. This does not militate against the rule or affect the laws of breeding, so long as first-class trotting stallions, bred from a trotting family coupled with good mares, sire trotting colts. Facts confirm theories. We have numerous precedents to confirm this fact. Patchen has scattered the trotter from Maine to California. Ethan Allen has begot them all over New England. Mambrino, in the West, has filled the measure of the sportsman's glory, and Hambletonian has flooded New York with the trotter in the highest form. The pedigree of many valuable horses has been consigned to oblivion by the neglect of their breeders. The history of others, when become known to fame, has been hunted up from tradition and found worthy of their performance.—[Wilkes' Spirit.]

SELECTING A COW.—It is sometimes the case that the best judges will be deceived. A cow of very unpromising appearance, coarse in the neck, large boned, and second or third rate milk marks generally, will, now and then, turn out to be first-rate, while another with these marks largely developed, fine in the head and neck and promising every way, will prove unsatisfactory. But a failure in this case is rare. Let the head be light, the forehead broad, the horn rather thin and clear, the eye clear and prominent, the neck thin, and the forequarters rather light, the back straight, the hind quarters well developed, wide over the loins, the carcass deep, the udder coming forward and well shaped, the skin soft to the touch, the teats well set, not too large nor too small, the tail long and thin like a whip-lash. Such a cow ought to be a good one.

ED. RURAL WORLD: Is there any advantage in site or aspect for a plum orchard? If so, what is the best location and exposure? Are plum trees hardy in this country, or are they, like cherry trees, subject to winter kill and bursting of the bark.

In preparing grounds for small fruits and vegetable garden by sub-soiling or trenching, is it better to throw the sub-soil out to the surface, or break it up and allow it to remain where it is?

SUBSCRIBER.



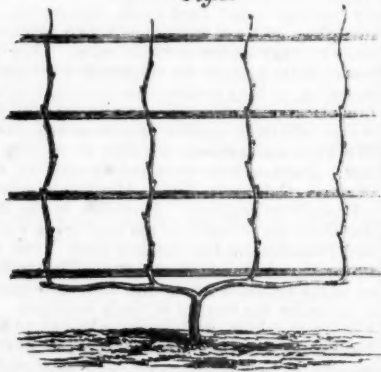
HORTICULTURAL.

Planting and Training Grape Vines.

THIRD YEAR.

The two shoots made during the second year are ready to be extended in a horizontal manner, and secured to the newly erected trellis. This should not be done later than February. These branches are now termed *arms*, and are to be cut back at the same time so as to leave two good buds or eyes on each arm, so that the upright shoots shall be eight or ten inches apart, any intermediate buds must be rubbed off. The four shoots that are permitted to spring from the arms must be trained to the trellis as in Fig. 3.

Fig. 3.



The summer and fall treatment must be the same as in the previous seasons.

FOURTH YEAR.

The two middle shoots or canes are suffered to remain in their position on the trellis, only they should be shortened to three or four feet in height at the time of the winter pruning. At this time, also, the two outside shoots should be secured in the horizontal line, extending the arms, leaving two good eyes on each at the distance of eight or ten inches apart, shortening the arms just beyond the last bud designed to grow. This will add two additional uprights, and two to be laid down, extending the arms as before. The two uprights remaining upon the trellis this season, may be permitted to mature each, two or three bunches of fruit, all other bunches should be removed at the time of blossoming. We will remark here that the future health and productiveness of the vine depend much upon care in not allowing the vine to overbear. Most persons are reluctant to remove the germ of a single fruit; but if the number is not reduced within the capacity of the vine to mature, and at the same time ad-

mit of a vigorous growth of wood, serious loss will be sustained; besides the fruit of an overtaxed vine is of but little value. This precaution must never be forgotten at any stage of the growth of the vine.

FIFTH YEAR.

At the time of the winter pruning for the

fifth year, the two outside uprights are to be extended in the horizontal line of the arms as before, and the uprights shortened to the proper length, and this is to be repeated until the vine presents the appearance of Fig. 4.

There are various modes of training grape vines, but the general principle is the same.—

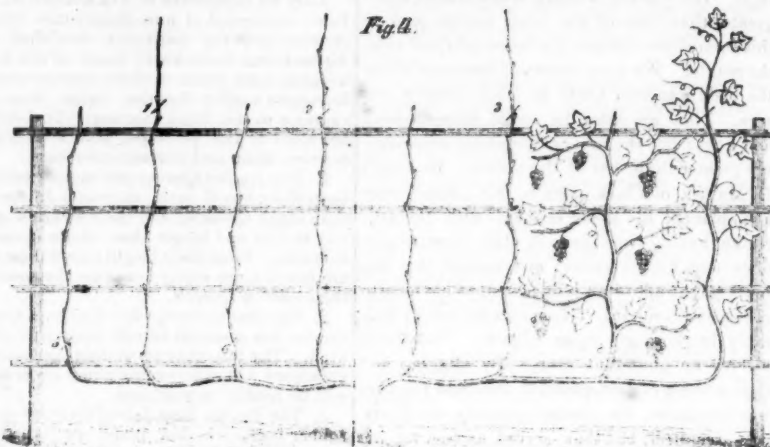


Fig. 4.

It must be borne in mind that the fruit spurs only put out from canes of the last season's growth; hence a system must be adopted which will keep up an annual supply of new canes.

In field culture, where the vines are trained to stakes, provision is always made for a new growth of canes for bearing wood for the next season, while those of the previous season's growth are maturing their fruit; these being cut down to the last bud or eye at the winter pruning, giving place to new shoots for the succeeding year, and so on. In garden culture, where the trellis is generally employed, the same plan is carried out, only the renewal of the fruit-bearing canes is made from the horizontal arms. After the uprights have matured their crop of fruit, they are cut down to the lowest bud, at the winter pruning, as at 5, 6, 7, and 8, Fig. 4. From these eyes new canes spring producing bearing wood for the following year, and the alternate canes that have just matured their crop are cut off in like manner; thus renewing one-half of the wood each year, while the other half is maturing its crop. The new shoots are also to be cut back to the top of the trellis as indicated at the cross marks, 1, 2, 3 and 4.

SUMMER PRUNING.

The summer pruning consists in removing all surplus branches, and pinching off the little side shoots as we have before indicated, leaving a single leaf at each pinching, and in shortening the laterals upon which the fruit is borne. These should be cut back leaving four or five leaves outside of the last bunch of grapes. The German vine dressers of the West, many of them, leave but one or two, a number entirely inadequate to the maturity of the fruit. This shortening of the fruit-bearing branches is performed when the grapes are about the size of small peas.

The two shoots on the right hand of Fig. 4,

represent the old cane in bearing and the new cane for the next year's fruit, except that the laterals are not permitted to extend to their proper length lest they should obscure the remainder of the cut.

We have thus endeavored to render this subject so plain and clear that none need misunderstand it. Without this care and attention, it is in vain to attempt to grow grapes, and yet all the labor required should be esteemed a pleasure besides an ample reward in an abundant crop of delicious fruit.

[Written for Colman's Rural World.]

EVER-BLOOMING ROSES.

Many persons are disappointed because their roses do not bloom constantly all summer, expecting from their title of Perpetual, that they should do so.

Now the class of roses called Hybrid Perpetual or Remontante, are not exactly rightly named—that is, they do not bloom perpetually, but only at intervals. They bloom full in June, and then give a few scattering blooms along during summer, and a good display again in September, doing better or worse, according as they are illy or liberally treated.—This class, however, possesses the most brilliant colors, largest sized flowers, and fullest and finest shapes, and is deservedly very popular. But the true and real Everblooming Roses belong to those classes usually called tender roses—the Bengal or China, Tea, Bourbon and Noisette; these, though more tender, and less robust than the other classes—are not absolutely tender, but in our latitude, by selecting the hardier varieties, may easily be preserved through the winters by necessary protection.

The simplest and surest method of protecting these classes of roses, is to bend down the stems and peg them close to the surface of the ground, then cover with a few inches of coarse litter.—Straw, stable manure is best in our opinion.

Throw on a little soil to keep it in place and do not fail to cover the crown of the plant. Even if such manure is drawn up around their stems six or nine inches high, the roots and lower branches are saved; and if the tops get killed, they can be cut down, and they will bloom as freely the coming summer as though all the top had been saved. This latter plan can only be adopted where the plants stand closely together in beds, which indeed is the most effective way to grow these as well as the Remontante roses. Beds should be prepared exclusively for their benefit, and if the soil is a clay loam, well-rotted manure may be added, and the beds spaded deeply, raising the surface of the bed a few inches above the natural level of the ground.

The plants of these dwarf growing varieties may be distributed about three feet apart over the beds, and a vigorous growth should be kept up by clean culture, stirring the soil often, top-dressing and digging in annually.

The following would comprise a dozen good varieties for such a bed; some would choose other varieties, doubtless, but these are believed to be as good as any.

Hermosa, pink; Duchesse de Thuringe, waxy, clear white; Cels, creamy white; Gloire de Dijon, bluish and yellow; Eugene Beauharnais, deep crimson; Madame Breon, rosy crimson; Bougere, bronzed rose; Annie Vibert, pure white; Daily Pink, a profuse bloomer; Agrippina, rich velvety crimson; Triumph de Luxembourg, salmon buff; Saffrano, fawn color, shaded rose. C. S.

Doolittle's Black Cap Raspberry.

Of all the Black Cap family of raspberries, this variety stands at the head of the list in our estimation. We have had it in cultivation for the past four years, and have been highly pleased with it.

Its first point of excellence consists in its ripening a week earlier than any variety we have in cultivation. On account of this earliness it commands a very high price in the market—other varieties of the Black Cap raspberry are largely cultivated in the vicinity of St. Louis, but do not come in competition with the Doolittle till its season is well nigh over. Our market is largely supplied with the Black Cap raspberry from Cincinnati, but they do not commence to arrive here until the Doolittle is entirely gone.

Another point of excellence is, its increased size, its greater amount of juice, and its improved quality over the common Black Cap.

We have cultivated for market the common black raspberry, and have found a great diversity in the fruit of the plants. While some of the plants are productive, others are quite unproductive. While some of the plants have quite large and passable berries, others have small and inferior ones. There seems to be any number of varieties in the same patch, but with the Doolittle this is different. The plants all produce fruit of the same size and quality; all are enormously productive. Large profits are derived from them when cultivated for market in the vicinity of our cities. They should be planted in rows about seven feet

apart, and the plants should be set about three and a half feet apart in the rows—or they may be set five feet apart both ways. The plant is remarkably healthy, hardy and vigorous, requiring not the slightest protection in winter.

New System of Grape Culture.

Dr. Schroeder has published what he terms a new system of cultivating the grape, so as to prevent the diseases to which the Catawba, Isabella, and some other varieties are subject. He claims that new vineyards are generally healthy, and his system is to keep up a new set of plants by layering, as follows:

"After preparing your land for the vineyards, plant the same with good strong layers or first rate cutting plants, from eight to twelve feet apart in a square, in the usual manner. When your vines come into bearing the first big crop, say the third or fourth year after planting, take one strong cane of the bearing vine raised for this purpose, close to the root of the vine make a little ditch with the hoe or spade, from four to six inches deep, in the row up to the centre between your two bearing vines; let this cane stick about one foot out of the ground, and, after covering your ditch, cut it off, as I said, one foot above the ground; this I will call the *first reverse*. Let from this grow three unchecked vines, two of them are for fruiting the next year, and can be cut long to give a good crop of fruit. The third cane is for the *second reverse*.

Cut your first reverse loose in the Spring from the mother vine, let the mother vine, bear a good crop or too, if you choose, as the case may be, then chop it away to give room for the second or third reverse.

Let us go back now to the *second reverse*. Take the third cane of the *first reverse*, lay it across the row up to the centre of the row as before described, four to six inches deep, and one foot above the ground, cut it off.

Now, you have instead of one, two rows of vines. Let again three canes grow of the *second reverse* (two fruiting and one for the third reverse). The *third reverse* is made by layering the cane of the second reverse in the new row up to the centre of the new row, and treat it the same way as the other reverses were treated. The *fourth reverse* is made by taking a cane (in the second year after fruiting) from the first reverse, and, after chopping the original mother vine out, to become the mother's place, one-third of the vines, or, as the case may be, one-fourth, are removed every year by chopping out, and thus making room for other reserves; and so go on till the day of judgment.

You will have in this way, by little labor and without any doctering, always a new and vigorous vineyard, free from disease, and paying well for your labor in superior fruit and wine. It may be that in some slower growers than Catawba or Concord you can make the reverse only every two years, but good healthy vines, in good soil and locality, will stand the reverse almost every year."

PEACH BUDS—*Ed. Rural World*: The peach fruit buds are all killed. Most of mine were alive till the last freeze. I learn Westfall's grape fruit buds are killed also. The peach and grape wood not hurt. T., Hannibal, Mo.

When fruit is ripe, it has served the purpose for which nature intended it—namely, its seed. It then goes to decay. The first stage is melowness; the second, rottenness; the third, gas, in the atmosphere, to be returned to fruit again.

[Reported for Colman's Rural World.] ENTOMOLOGY.

We have felt with greatly accumulating force during the past year, the difficulty of the practical worker and the scientific observer being united in the same person; the labors of the garden, field, orchard or vineyard are so long continued, pressing and severe, that, although coming in constant contact with insect life in its varied forms and with their operations, it almost entirely precludes the necessary inquiry as to their history and position in the economy of nature; and leads us with renewed earnestness to ask, Who can devote himself to the study of insect life in our State? This is a department of Natural History which opens up a wide field for usefulness and distinction in our State, to which we call the especial attention of our young men and is an equally appropriate sphere for the LADIES.

We take much pleasure in noting the fact of the increased attention that is being given to the subject and to the valuable assistance that is being gratuitously given by the publication of the "Practical Entomologist," under the auspices of the Entomological Society of Philadelphia, and can be obtained by the pre-payment of postage, through E. T. Cresson, 518 South Thirteenth street, Philadelphia. The publication by Dr. Trimble of his new work, "The Insect Enemies of the Fruit Grower," is another aid to this important study. That there is a duty that the General Government and State governments should be urged immediately to discharge to the cultivators of the soil. It is the publication of extensive cheap editions of the best works on Entomology and Ornithology. It is well known that the lives of men have been spent unrewarded, and the results of their labors lost to the world, from the vast expense of the drawings and illustrations necessary to explain the text. Let the Government undertake the letter-press and illustrations of large editions that could thus be sold as cheaply as our ordinary works and let the proceeds go to reward the author.

The great excess of rain during the past season, greatly encouraged insect life, and as a result we have found the grasshopper, cut-worm, leaf-folder, apple tree and peach tree borers, codlin moth, tent caterpillar, curculio, &c., very numerous; and the lateness in the season at which we had killing frost, gave them ample time to commit their depredations and get into winter quarters to become a scourge tenfold more dreadful during the coming season. Last season the "wooly plant louse," *Eriosoma lanigera*, in its winged state was to be met with in abundance; a circumstance never observed before in this locality, the excessive dryness of the climate going far to keep this pest within narrow limits. "The Leaf Folder," *Desmia Maculalis*, was destructive in the extreme, three several times did we go over every leaf on every vine and destroy the worms, the aid rendered by the little Yellow Jacket is worthy of record—in hosts they visited the vine-leaves, entering at the open end of the rolled leaf and bearing off the worms to feed their young; but, late in the season, the Yellow Jacket, with the wasp and hornet, became a perfect pest, attacking the ripe grapes, particularly the late varieties, leaving nothing but empty skins and dry rattling seeds—on Norton's Virginia they were particularly severe. While the "Leaf Folder" was at work on the thick-leaved varieties, the Clinton suffered from the attacks of a variety of the *Tettigonia Vitis* which punctured the leaves to deposit its eggs: around these a wart-like excrescence was formed, each containing a small worm, and the foliage became quite roughened and brown, this, fortunately, took place late in the season, and only on the young leaves at the extremity of the shoots, and were cut off and burned without much injury to the vine; the Taylor and Cynthiana on the one trellis opposite, and the Norton on the other, and on the same trellis adjoining the Clinton were exempt. We have been working the vines during the winter in order to destroy the insects that may be hid in the ground and around the stem by the frost. The Tent-Caterpillar was a terrible scourge, some trees looking as if fire had passed through them: these we destroyed by holding a dish with lighted charcoal, over which sulphur was sprinkled, and swept what worms did not fall, with a brush.

In the woods the crab, white thorn, hickory and young white oak, suffered to an immense extent and laid a wide spread foundation for their future operations. We call the especial attention of tree planters to the great numbers of young peach tree worms that are to be found in the roots of the trees in planting, and suggest that a little care in cutting them out of the trees in planting, will save much subsequent trouble.

We cannot close our eyes to the fact, that each year renders the culture of fruit, grain, &c., more difficult than before, and this for two reasons: First—We, in the culture of fruit, grain, &c., provide aliment

more in harmony with the wants of these forms of insect life, than is afforded by the productions of a country in its wild state; and, secondly—We have waged an unceasing war upon the birds, snakes and other reptiles, that depend upon insects for their sustenance.

The wild turkey, quail, &c., are rapidly vanishing, and the insects that sustained them have undisputed sway. Man has a traditional, almost instinctive hatred of snakes: but if we would ask his history, examine into his crimes, learn his uses, before we inflicted such summary punishment—we might find him our best friend instead of our most hated enemy.

But few snakes in this State, at least, are poisonous, and we find it a law fixed in the nature of the snake by the Great Creator, that it will not volunteer an attack, but will try every method to escape from man. As men whose every act is controlled by intelligence, let us enquire into the uses of all the Creator's works, try to learn how He has balanced the operations of nature, and disdain to let our ignorance be the only plea we can offer for the destruction of life, lest, as with the snake, we be found warring against our best friends.

then, have you? The trees that are worthless, or a lawsuit; and from both, may the good Lord deliver you.

The West is swarming with tree-hawkers, who visit every precinct, and make it their determination to button-hole every farmer in *Union Despatch* style. Beware of them! If we should paraphrase the sacred writ, in a single word, it would present a faithful representation.

Beware of tree imposters, which come to you in sheep's clothing (smooth speech and feigned integrity), but inwardly they are ravenous wolves. Ye shall know them by their fruits. Do men gather grapes of thorns, or figs of thistles. Even so: every good tree bringeth forth good fruit; but a corrupt tree bringeth forth evil fruit. A good tree cannot bring forth evil fruit neither can a corrupt tree bring forth good fruit. Every tree that bringeth not forth good fruit is hewn down (or ought to be) and cast into the fire; wherefore, by their fruits ye shall know them. If you intend to plant trees, see what you are to pay for before you part with your money. Ask yourself these questions: Is the nursery healthy, free from disease and worm-plagues that produce them? Am I endangering my old orchard with an importation of lice and canker-worm? Am I certain that I have the varieties that I am to pay for? All these questions, whether correctly answered or otherwise, will have a mighty influence in brightening or darkening your fruit prospects. If you begin with the few reliable varieties, and your stock is selected from a healthy and reliable nursery, and you are certain that you have genuine kinds, you are bound to succeed. If you are coaxed, cajoled and overpersuaded by swindling tree agents—flattered out of your common sense and judgment into a purchase of something you know not what: you will reap the inevitable consequences of fraud and villainy, disappointment, vexation and loss.—[Rockford (Ill.) Register.

FRUIT TREE IMPOSTORS.

The season is rapidly approaching when farmers should have matured their plans for filling up their orchards—thinned by accidents and decay—and completed their lists for new ones they contemplate setting out the coming spring. A good maxim for the fruit-grower, in this climate, is to repair the old and make an addition of a hundred or more of trees of the best varieties each year. Orchards will run down—trees will die—tornadoes, lice, canker-worms, borers, and an extremely low temperature will make them perish; and it behooves the farmer, if he would be successful in raising good fruit and plenty of it, to fill up the broken ranks with healthy and thrifty recruits, and continually combat the obstacles and enemies that oppose his industry. In purchasing nursery stock, it requires more caution, prudence and sagacity than is generally exhibited by tree-planters. The West has been swindled for more than a quarter of a century by unscrupulous dealers here, as well as at the East, who have named their trees, as they have dug them, to suit the selections of their customers. Such impostors are always supplied with the varieties called for, and many a victimized purchaser has—with a heart inspired by the visions of "the good time coming," when the family circle would gather round the table of a winter's evening, to enjoy the fruits of the old remembered times—gone home with his Greenings, Willow Twigs, Talman Sweets, Porters and Rambos, all dug out of one row, and that row, entirely, some fast-growing, unprofitable good-for-nothing.

Why the West is so full of unproductive orchards—why so many have abandoned fruit-growing as unprofitable, and given this locality and climate an undeservedly hard name, is for the very reason that over one-half of the trees that have been set are false to name and recommendation. They are swift growers in the nursery—they become merchantable in two years, or three at most, because they make timber so fast; but they are barren of fruit, and men might as well expect "to gather grapes of thorns, or figs of thistles," as to receive a decent revenue from such unproductive kinds. Farmers have been swindled, and they continue to offer themselves up as willing victims upon the altar of villainous deception, and pray to be sacrificed by traveling tree-venders, and grape-vine peddlers, who perambulate the country with highly colored fruit-plates, thus appealing to the admiration and cupidity of farmers, tempting them to give orders for trees and vines they have not yet seen, and know nothing of their size, condition or quality. Our advice is to farmers, everywhere, never to buy a fruit tree or grape vine of unknown or irresponsible persons. Shun them as you would a contagion! If you give these impostors your orders, your fruit trees may arrive too late, in a damaged condition, and inferior to what was recommended. What redress,

KEEPING FRUIT.

The warm weather of the past fall and the opening of winter, have taught us a lesson in keeping fruit. The usual means of preserving fruit, were, it is found, not the proper means. Let us not be discouraged. Such falls may occur again; but it does not therefore follow that the fruit in like manner shall suffer as it has this fall: for, notwithstanding the discouragement, we may save our apples and pears.—There always is some cold weather—at least cool nights, as was the case this fall—and that is our advantage. We need but avail ourselves of what cold weather we have during the season that fruit is kept—and there is no difficulty in keeping fruit. The point is: open the windows of your cellar or fruit-house, when the weather is cool—which it is abundantly nights during the fall—and close them during the days, or for several days. In no case keep the door or windows open on warm days, particularly when the south wind blows, as it will blow out of your cellar or room the cold air. The rule is, simply open when cold; shut when warm. In other words, keep as constant and even a temperature as possible. Changes of temperature are bad for fruit. Warm days and cold nights, if both have access to fruit, will soon use it up.

It is through the people's negligence that they have lost their fruit. They had it in their power to keep it cool, had they but taken the precaution. But the windows of cellars were left open, as we have seen, we may say gener-

ally; and the result was warm cellars, i.e. warm and cold. We repeat: close your cellars during the day; and when a cool night occurs, throw them open. This will save the fruit, even with such a fall as we have had.

Warsaw (Ills.) Horticultural Society.

A flourishing Horticultural Society has been started at Warsaw, Ill. It has a number of intelligent and wide-awake Horticulturists among its members. We select from the proceedings of a late meeting the following on the subject of grapes:

"Dr. Schroeder's plan of preventing mildew, by keeping the vineyard always young and constantly layering, first in one direction, and then another, which the Doctor calls his 1st, 2d, &c., 'reverses,' coming up. Dr. Hay asked, whether any one present knew whether the vineyards at Cincinnati were free from rot for the first eight or ten years. Mr. Laieslee replied they were not—which would indicate that the Doctor's plan there has no basis of fact to render it necessary, and experience in this county goes to show that no necessity for this operation exists, for the reason that our grapes have not rotted worse upon old vines than upon young ones, where the circulation of air was equally unobstructed. Mr. Laieslee observed that he had not seen mildew at a temperature less than 75° accompanied by excessive moisture; rot occurs without mildew, but mildew does not exist to any extent without rot.

Mr. Bliss observed, that Dr. Schroeder used the word 'reverses' in the original sense of a turn-back, or change (of location) of the vine, for the better; but if his plan was necessary, we should accept these layerings in the universally received American meaning of the word 'reverse'—i.e., misfortune or disaster, and in that sense as 'reverses' indeed; but we have had thirteen crops of wine here, and setting aside the first two crops as good, for the Doctor's reason, viz: because the vines were young; we still have ten full crops, and a partial crop the wet year, to rely upon, as ten good reasons (and more) that it is not the age of the vines that causes the mildew, to one (or less) that it is.

Geo. B. Worthen and C. Laieslee reported as follows upon the effect of the late excessive cold upon the grape buds: Catawba from 1 to 3 killed, according to locality and ripeness of wood; Concord, very few buds killed; Norton's Virginia Seedling, the same; Delaware, buds mostly safe and good; Clinton the same. Mr. Bliss reported on the same subject as follows: Dr. Grant's Israella, two years old, cane over ten feet grown and well ripened, with tight board fences eight feet high, six feet North of it and five feet West of it, every bud, primary and secondary, killed to the snow line; Delaware buds nearly all good; Diana less injured than Catawba."

We are indebted to N. W. Bliss, Esq., Secretary of the Warsaw Horticultural Society for the following:

"Statement of number of Vines and Apple Trees growing in Hancock County, Illinois, January 1, 1886, also number of Gallons of Wine made fall of 1885.

Region.	No. of Vines.	Galls. Wine.	Apple Trees.
Nauvoo,	425,000	35,000	15,300
Warsaw,	140,000	6,500	35,000
Dallas,	40,000	2,500	31,000
Pontonsuc,	30,000	500	
Hamilton,	40,000		
Basco,	15,000		
Carthage,			23,000
Augusta, &c.,			22,000
Other localities, say:	10,000	2,500	73,700
	700,000	47,000	200,000

There are 250 vineyards at Nauvoo, and 75 at Warsaw."

PROFITS OF GRAPE CULTURE.—The Messrs. Lawvers of Cobden, Ill., planted a vineyard of 6,000 vines, Concord and Delawares. This planting was two years ago last Spring. Their crop the present year was 5,000 lbs., selling at from 30 to 50 cents per lb. This, their first crop, pays back all expenses. Should the rot destroy half the crop, it will yet pay to grow grapes at 10 cents per lb.—[Country Gentleman.



THE PREMIUM GRAPE VINES.

As many of our Club Agents have written us they will call or send for their grape vines, and as we are daily receiving letters to that effect, we have concluded not to mail the vines till after April 1st. This will be abundantly early—as early as grape growers are in the habit of setting out their plants. This will also enable club agents to still enlarge their clubs. New clubs can also be formed. But no time is to be lost. We are very thankful to our friends for so greatly extending the circulation of our journal. We hope they will continue to use their exertions in its behalf. We are happy to hear of the satisfaction it is giving its readers everywhere. We hope that all who take it will feel an interest in it, and contribute what they learn by experience and observation to its columns.

Report of the Board of Agriculture.

We have received the First Annual Report of the Missouri State Board of Agriculture. It is a very neat volume of 664 pages. It opens with the Report of the Corresponding Secretary, which contains a brief notice of past agricultural associations in the State; treats of many of the prominent errors of the past, and makes modest and very sensible suggestions for improvement in the future. Selections from the doings of other Agricultural Boards are very judiciously made. This portion of the Report will give farmers a very good idea of the merits of the different breeds of cattle and sheep, and their adaptation to different purposes and the various soils of the State.

Excellent illustrations are given of Ayrshire cattle belonging to the herd of Hon. Samuel Campbell of New York State, from whom several very fine animals were purchased last fall for the farm of Leonard B. Holland, of this county. An illustration and plans of Mr. Holland's farm barn, are also given. There are about twenty illustrations of sheep, showing the character of most of the breeds of sheep in use in this country, and sufficient to aid the inexperienced farmer in determining which breed is best adapted to his purpose.

There are also illustrations of several of the newer and more important improved agricultural implements in use in the West.

An article on "Butter Making," taken from the Maine Agricultural Report for 1863, gives as plain, concise, and full information on the subject as can probably be found in print. The Secretary seems to have thought, justly, that such information was needed in our State, if not desired.

We call the attention of our readers to the Advertisement of Hooftland's German Bitters, which may be found in another column. It professes to be a genuine tonic and free from inebriating ingredients.

ARE YOU READY?

Spring is here. Are you prepared for the spring campaign? Have you good strong teams to tear the plow along deeply through the soil? Are your harnesses in repair, with a good supply of good collars, so that if one chafes a horse, another can be used in its place? A good collar is the most essential part of the harness. A horse can't work with ease, nor lay out his strength to advantage in a poor, hard, harsh collar.—Are your plows bright and sharpened, and are they of the right pattern? Have you a spare one or two on hand, so that if you break one, you can hitch to another without loss of time? This having a good plow that will turn a deep furrow with ease to the team, is a matter of the highest importance to the farmer. And then a good harrow to finely pulverize the soil and prepare it for the seed, is very important. One good harrow is worth two or three poor ones. It is a great saving of time and labor. Have you good, sound, plump, clean seed, ready for sowing or planting? Recollect, "Like begets like." To have a good crop of grain, you must have choice seed. It must be run again and again through the fanning mill, screening and blowing out all foul and shrivelled seed. It will pay richly for the care and labor. Don't fail to have plenty of clover seed on hand: your deteriorated fields need it. It is cheap—only about eight dollars per bushel. Apply it. It makes good pasture, good hay, and good soil. It is the manure heap of the farmer.

BEAN AND PEA CULTURE.

The culture of beans and peas is too much neglected. They are not only profitable crops, but have a very beneficial influence upon land. Some farmers contend that they are as fertilizing as clover. We would like to hear of some well conducted experiments where clover, beans and peas were used—say an acre of each, and then all sown in wheat, and the wheat on each acre measured, to see the relative effects of the various crops. We think clover is preferable to any other crop as a fertilizer, but know that peas and beans are highly beneficial crops to employ in a system of rotation. In fields pretty well worn, good crops of peas may be raised, and the fields will thank one for the kindness shown them.

Protecting Sheep from Dogs.

We hear sad accounts of sheep being killed by dogs. In all the Western States the loss is very great yearly. It is a great drawback to sheep husbandry, but the loss can be very much lessened by a little care. They are generally killed at night. If they can be pastured near the house, and put in a yard with a high and tight plank fence, there is no danger of loss. Bells put upon, say, every tenth or twentieth sheep, will produce such a clatter that the dog will sneak off, if he sets the flock in motion. They seem to know that they will be found out, if the bells get to ringing. If cattle and sheep run together, the sheep will fly to the cattle if dogs pursue them, and the cattle will fight the dogs. Sheep require care

and attention, like all other things, and the farmer who neglects them will find he has made a bad investment.

BACK NUMBERS EXHAUSTED.

The increase in the number of our subscribers has been so great, as to completely exhaust our very large edition up to the 15th of Feb. We thought we had an ample supply for all new comers, and we have been able to supply all up to this time—but every mail brings scores of new recruits. Our most sanguine expectations have been more than realized. Of course, those whose subscriptions begin with Feb. 15th, 1866, will not end till Feb. 15th '67.

ANNUAL FAIR OF THE MACOUPIN COUNTY (ILLS.) AGRICULTURAL AND MECHANICAL SOCIETY—The Annual Fair for 1866, will be held at Carlinville, on the 4th, 5th, 6th and 7th days of September.

Peach Buds—Crops.

ED. RURAL WORLD: We had a very interesting time at our late Horticultural Meeting at my house. About sixty were in attendance; all left well pleased. The peaches are killed in most places if not all. These hard freezes may have something to do with determining the proper sites for an orchard. The improved cherries are also killed. The wheat crop is starting finely in most places. Many persons predicted that the dry freeze in the fall had materially injured it. A wheat crop is never safe until the farmer has the money in his pocket. The finest crops that we ever raised in these parts have been destroyed in the shock.

Hannibal, Mo.

O. H. P. LEAR.

Meramec Horticultural Society.

ALLENTON, 1st. MARCH, 1866.

The Eighty-eighth Meeting of this Society was held in the School House, Allenton. President Harris in the Chair. Minutes of former meeting read and adopted. Letter from M. S. Trierson, Tenn., was read by the Secretary. Magnificent samples of Newtown Pippin, Jenetion and Pryor's Red Apples; excellent cider from Jenetion and Wine Sap apples, and good samples of leaf Tobacco, were presented by Mr. Harris. The discussion of the fruit catalogue of American Pomological Society was proceeded with.

President Harris called attention to the importance of members, during the coming season, making each some cider from the several apples separately, in order to test thoroughly their several qualities, flavor and keeping capacities.

President announced next meeting to be held at Eureka School House, on the first Thursday of April. Wm. Muir, Secretary.

PUBLIC SPEAKERS AND SINGERS WILL FIND "Brown's Bronchial Troches" beneficial in clearing the voice before speaking or singing, and relieving the throat after any unusual exertion of the vocal organs, having a peculiar adaption to affections which disturb the organs of speech. For Coughs and Colds the Troches are effectual.

Keep your feet dry, wear good shoes, keep them well stuffed with oil, and well mended, and then if you are unfortunate enough to get a cough or cold, use Coe's Cough Balm to cure it. It will do it every time.

It is also important that our readers should all know that Coe's Dyspepsia Cure is reliable and certain to cure the worst cases of Dyspepsia; one teaspoonful a day of it will enable the most confirmed dyspeptic to eat anything he chooses without trouble. It is an excellent remedy for any disease of the stomach or bowels.



MARGERY.

The bells of the village church had been ringing sweet and clear, and the sound was borne on the summer air miles away, making solemn music, which was very pleasant to a little lonely heart.

On the stone steps of the farm-house, watching the shadows, or looking now and then with a wishful glance toward the bright sky, sat Margery.

Margery who? "That was all; she had no other name," she said, when strangers questioned her.

Farmer James had found her one wintry night on the snow-drift by the road side. She was warmly wrapped and sheltered from the storm. Several changes of clothing, a sum of money, a paper on which was written "Margery," were in a basket near. She had been kept by the farmer's wife, who hoped some day to be rewarded, and who at first built many air-castles, which had for their foundation the coming of Margery's rich friends. She was sure they were rich, she said, for the child's clothing was fine and soft, and lace upon her little gown was worth more than her best Sunday gown.

But as years passed, and these unknown persons gave no sign, she grew weary of her charge, and by degrees indifference gave way to actual unkindness.

Poor little Margery! what had she done, and why was she so unlike the happy children whom she sometimes met? She often wondered, as she did that Sunday afternoon, sitting in the sunshine, how many miles off heaven was, and if she could walk there if she tried? "I wish I knew which road to take, and had somebody to go with me, for I am so tired living here."

Little children, who, with folded hands, say your "Now I lay me down to sleep;" who are laid to rest by loving hands, with your mother's good-night kisses on your lips—little happy children how blest are you who read wonderingly of this child, whose life was so unlike your own.

Margery had been taken once by a kind neighbor with her children, to the village Sunday school. There she heard for the first time of a beautiful place called heaven, the home of God and his angels. The good old minister was talking of Jesus, of the little ones whom he had blest while on earth, whom He still loved in heaven, where, after death, good children would go to be shining angels in the sky.

Margery went home like one in a dream. She scarcely heard the scolding words that Mrs. James poured out like a torrent. She should not always have to be scolded and beaten. She should not always be tired and lonely. There was some one who would love her, if she only knew the way there.

She kept the sweet thoughts in her little sad heart; dreamed of them when she slept, and took comfort in them as she went upon her errands day by day, or tended the fretful child whose mother had so little pity for her desolation.

One morning when the busy dame seemed to be in an unwatched mood, more gentle than she remembered to have seen her, Margery took courage and ventured to ask for information on

the subject that had occupied many of her thoughts.

"If you please, ma'am, how far is it to heaven?"

The astonished woman dropped her iron, putting in danger thereby her good man's Sunday linen.

"What put that into your head, I'd like to know?"

Poor frightened Margery! for anxiety to hear something of the blissful home she was determined to seek, gave her courage.

"I heard the minister talk about God in heaven, and I thought if it wasn't too far and I could find the way, I'd like to get there."

"Well, I never," said Mrs. James, and turning fiercely upon the child, "Do you think it's a place for the like of you? because, if you do, you're mistaken, I can tell you. Try to get there, indeed! I think you may try! Now just do you go and shell them peas, and don't let me hear you talk such foolishness again!"

So the child went out once more into the shadow that had so long been like a pall on her heart, and the great hope that had been like a sunny gleam for a little while, suddenly faded out of her yearning heart.

But the longing was still there. Margery had never been taught a prayer, she did not know that God could read her every thought and wish; that his eye of love was always watching over her; if she had, she would not have fallen asleep so often, with her cheeks wet with tears, or have looked around on the meadows, and up into the sky as then, with such a hungry feeling for love and kindness.

She was alone, as she had often been on Sabbath days; no mother's loving fingers fashioned dainty robes for Margery; "she ought to be thankful," Mrs. James told her, "to have such decent clothes: it wasn't every one who would give them to her—but for her part, she couldn't abide rags!"

The decent clothes, however, made so poor a show that she did not choose to exhibit the child who wore them to gossiping neighbors.

So the little girl staid quietly at home, alone, as I said before, except that "Watch," the house-dog, moved lazily after her when she walked about, and sometimes rubbed his cold nose against her hand, and wagged his tail, as much as to say, "Don't fret, here is one friend for you!"

And the great Friend above all others, whom Margery did not know, looked down upon the lonely child, and saw how desolate her young life was. So it was, that but a few more Sabbaths found her in her accustomed place upon the doorstep, or in the meadow, or looking out at night, from her little window, at the shining stars.

There came a time, when a dreadful fever took from many homes, one and another, who were sadly missed, and its fatal touch was laid on Margery, for whom no one cared on earth, but who was just as precious in God's sight as those whose graves were wet with many tears.

The bright spirits whom we cannot see, though they are often near, watched over Margery. A neighbor who had buried her own little daughter was sitting by the child at the last, and thinking she asked for water, took it to her: "Isn't it beautiful, beautiful?" said the little one, "I shall get to heaven after all; they've come to show me the way! Isn't it beautiful?" and with a smile on her lips, and a light in her eyes that made her face gloriously fair, the soul of little Margery was borne up to that Beautiful Land, and the songs of the angels welcomed her, where she could never be sad nor lonely any more!

Think much, and you will find much; but think forward, not round and round, like the tread-horse, till the way becomes weary; no progress is thus made.

ONE WINTER'S NIGHT.

Out-doors the air
Is pure and rare.
And frosts itself in silver gems;
And flings its nets
In slender frets
On all the leaves with diadems.

The broad fields glow
With crusted snow,
And glimmer in the moon's white rays;
The endless beds
That winter spreads,
For sleeping flowers of summer days.

The pine trees grand,
Like sentries stand,
Bediamonded, glittering, stately,
And o'er the snow,
Their branches throw,
To guard the spot where lately

Sweet roses blushed,
And dull clouds flushed,
And all the land was teeming
With sunny hours,
And nodding flowers;
Like God's great heaven seeming.

We stood beside
The fire-place wide,
And watched the sparks that upward rise;
Around her waist
My arm is placed;
I see sweet truth shine in her eyes.

I say that life
Is short, and rife
With crosses, cares and sorrow,
And in the night
Is quenched the light;
Comes not the dawn of morrow.

The red fire glows,
And o'er her throws
Its flickering flood of glory;
Her upturned face
Is full of grace
Like her's of Holy Story.

She says, Yes, life
Is short, and rife
With crosses, cares and sorrows;
Yet, still the light
Shall break the night,
And shine in long to-morrows.

So I kiss her eyes
And lips, and prize
The heart God sends to cheer me,
And breathe a prayer
In the firelight there,
That she be ever near me.

As o'er the snow
My footsteps go,
I see the great moon beaming;
And in the skies,
The stars, like eyes,
With tender lights are teeming.

ST. LOUIS DISPATCH.

KNITTING.

We believe in knitting—knitting by hand. Our mothers and grandmothers were famous knitters. And such socks and stockings as they gave us! It would make our feet laugh to get them now. They were warm and they would last. Made of good double and twisted yarn—soft and smooth, knit with mathematical precision, your toes wouldn't drive through them the first time you wore them, nor hardly the first three months. And then your foot felt like a foot with them on. But these modern factory woven things—shaped as well for a horse's as a man's or woman's foot—thin as lace—frail as gossamer—a tissue of single-threaded, half-twisted yarn! What do they amount to? We beg all the mothers to teach their daughters to knit. It is a good way to make odd moments useful. It is a good way to make a family comfortable and healthy. I cannot bear the idea that my children will have to wear factory-made hosiery.

HOW TO EAT WISELY.

Dr. Hall, in his journal, gives the following advice:

"1. I never sit down to a table with an anxious or disturbed mind; better a hundredfold intermit that meal, for there will then be that much more food in the world for hungrier stomachs than yours; and besides, eating under such circumstances can only and will always prolong and aggravate the condition of things.

"2. Never set down to a meal after any intense mental effort, for physical and mental injury are inevitable, and no man has a right to deliberately injure body, mind, or estate.

"3. Never go to a full table during bodily exhaustion—designated by some as being worn out, tired to death, used up, done over, and the like. The wisest thing you can do under such circumstances is to take a cracker and a cup of warm tea, either black or green, and no more. In ten minutes you will feel a degree of refreshment and liveliness which will be pleasantly surprising to you; not of the transient kind which a glass of liquor affords, but permanent; for the tea gives prompt stimulus and a little strength, and before it subsides, nutriment begins to be drawn from the sugar and cream, and bread, thus allowing the body gradually, and by safe degrees to regain its usual vigor. Then, in a couple of hours, you may eat a full meal, provided it does not bring it later than two hours before sundown; if later, then take nothing for that day in addition to the cracker and tea, and the next day you will feel a refreshment and vigor not recently known.

"No reader will require to be advised a second time who will make a trial as above, whilst it is a fact of no unusual observation among intelligent physicians, that eating heartily under bodily exhaustion is not unfrequently the cause of alarming and painful illness, and sometimes sudden death. These things being so, let every family make it a point to assemble around the family board with kindly feelings, with a cheerful humor, and a courteous spirit; and let that member of it be sent from it in disgrace who presumes to mar the ought to be blest union, by sullen silence, or impatient look, or angry tone, or complaining tongue. Eat in thankful gladness, or away with you to the kitchen, you graceless churl, you ungrateful pestilent lout that you are. There was a grand and good philosophy in the old time custom of leaving a buffoon or music at the dinner table."

CURE FOR CHOLERA.—The *National Intelligencer* has the following:

Rev. Dr. Hamlin, of Constantinople, saved hundreds of lives by the following simple preparation, during the terrible raging of cholera in that city a few years since. In no case did the remedy fail where the disease could be reached in season. It is no less effective in cholera morbus and in ordinary diarrhea.

One part laudanum,
One part camphorated spirit.
Two parts tincture of ginger.
Two parts capicum.

DOSE.—One teaspoonful in a wine-glass of water. If the case is obstinate, repeat the dose in three or four hours.

The seeds of genius are possessed by all men—but are generally so deep in the soil that they cannot be reached.

The mind will not be moved by itself; there must be an influence of some kind to act upon it. But often the best influences are unavailing.

A fly is a domestic; but like some domestics it were better turned out.

The wasp is a knight among insects, and carries his weapon with him ready for a tilt.—He is about of the same benefit as a knight.

[Written for Colman's Rural World.]

SCRAPS.

A maiden's heart is a prison. When opened by her lover, out pop the prisoners—kisses and sighs.

The smile of love has always a sigh becloud it.

The true student is like the ore of the mine—preparing in darkness to reflect the light.

The little dust is trod upon, yet it rises from under the foot and sails above it. It supports the world; gives life to the very foot that oppressed it, and is part of the multitudinous number that makes up the globe. It cheats you in the scale; it radiates the diamond. It is unnoticed; yet it does its work in the world.—It was you once; you will be it again.

HOME.—After all, downright, plain comfort, is what we are all after. There is a household corner in every heart, where father and mother, brother and sister, reside. Here is our only home, much as we may roam. There is beauty in mystery—gratification in novelty—but the mind will leave all, and go back to the old humble hearthstone, and there rest itself.

Influence is always felt, whether the man intends it or not. He is a walking magnet, attracting and repelling.

The boy generally foreshadows the man.

Education should always be directed to the development of a man's faculties—never to the making of a man; that is the Creator's work. It is for this that education is instituted—to aid—not to create.

Some people cry up that they never have time to do such and such a thing; yet these people (were a reckoning kept) would have months of leisure during the year. This same leisure is taken advantage of by the successful ones. There is time to spare even from the most busy life with these.

A moment given to a thing that we relish, is worth an hour when unrelished.

SUNDAY EXCUSES.

This list of excuses for not going to church is amusing, but may be much increased:

Overslept myself; could not dress in time; too windy; too dusty; too wet; too damp; too sunny; too cloudy; don't feel disposed; no other time to myself; look over my drawers; put my papers to rights; letters to write to friends; mean to take a ride; tied to business six days in a week; no fresh air but on Sunday; can't breathe in church; always so full; feel a little feverish; feel a little chilly; feel very lazy; expect company to dinner; got a headache; intend nursing myself to-day; new bonnet not come home; tore my muslin dress down stairs; got a new novel must be returned on Monday morning; wasn't shaved in time; don't like the liturgy, always praying for the same thing; don't like extemporary prayers; don't like an organ, 'tis too noisy; don't like singing without music, makes me nervous; the spirit is willing but the flesh is weak; dislike an extemporary sermon, it is too frothy; can't bear a written sermon, too prosy; nobody to-day but our own minister; can't always listen to the same preacher; don't like strangers; can't keep awake when I'm at church; fell asleep last time I was there, don't mean to risk it again; mean to inquire of sensible persons about the propriety of going to such a place as church, and publish the result.

The Great Strengthening Tonic.
(Not a Whisky Preparation.)

HOOFLAND'S
GERMAN BITTERS

WILL CURE
DEBILITY! DEBILITY!
resulting from any cause whatever.
PROSTRATION OF THE SYSTEM.

INDUCED BY
**Severe Hardships,
Exposure,
OF Fevers,
DISEASES OF CAMPLIFE**
Soldiers, Citizens, Male or Female, Adult or Youth,

Will find in this Bitters a pure Tonic, not dependent on bad liquors for their almost miraculous effects.

**DYSPEPSIA,
AND DISEASES RESULTING FROM DIS-
ORDERS OF THE LIVER AND
DIGESTIVE ORGANS.**

ARE CURED BY
HOOFLAND'S GERMAN BITTERS.

This Bitters has performed more Cures, gives better satisfaction, has more testimony, has more respectable people to vouch for it, than any other article in the market. We defy any one to contradict this assertion, and

WILL PAY \$1000
to any one who will produce a certificate published by us that is not genuine.

Hoofland's German Bitters,
Will cure every case of
Chronic or Nervous Debility,

and Diseases of the Kidneys.
Observe the following symptoms resulting from disorders of the digestive organs:

Constipation, Inward Piles, Fullness of Blood to the Head, Acidity of the Stomach, Nausea, Heartburn, Disgust for Food, Fullness or Weight in the Stomach, Sour Eructations, Sinking or Fluttering at the Pit of the Stomach, Swelling of the Head, Hurried and Difficult Breathing, Fluttering at the Heart, Choking or Suffocating Sensations When in a Lying Posture, Dimness of Vision, Dots or Webs before the Sight, Fever and Dull Pain in the Head, Deficiency of Perspiration, Yellowness of the Skin and Eyes, Pain in the Side, Back, Chest, Limbs, &c., Sudden Flushes of Heat, Burning in the Flesh, Constant Imaginings of Evil, and Great Depression of Spirits.

REMEMBER,

That this Bitters is not Alcoholic, contains no Rum or Whisky, and cannot make Drunkards, but is the Best Tonic in the World.

From the Rev. E. D. Fendall, Assistant Editor Christian Chronicle, Philada.

I have derived decided benefit from the use of Hoofland's German Bitters, and feel it my privilege to recommend them as a most valuable tonic, to all who are suffering from general debility or from diseases arising from derangement of the liver.

Yours truly, E. D. FENDALL.
From Rev. D. Merrige, Pastor of the Passyunk Baptist Church, Phila.

From the many respectable recommendations given to Dr. Hoofland's German Bitters, I was induced to give them a trial. After using several bottles, I found them to be a good remedy for debility, and a most excellent tonic for the stomach. D. MERRIGE.

BEWARE OF COUNTERFEITS.
See that the signature of "C. M. Jackson" is on the wrapper of each bottle.

Should your nearest druggist not have the article, do not be put off by any of the intoxicating preparations that may be offered in its place, but send to us, and we will forward, securely packed by express.

**Principal Office and Manufactory,
No. 631 ARCH STREET,**

PHILADELPHIA, PA.

JONES & EVANS,

[Successors to C. M. JACKSON & CO.]
PROPRIETORS.

For sale by Druggists and Dealers in every town in the United States. mar15-ly

DOMESTIC DEPARTMENT.

FIRE-PROOF AND WATER-PROOF PAINT.—Take a sufficient quantity of water for use; add as much potash as can be dissolved therein. When the water will dissolve no more potash, stir into the solution first, a quantity of flour paste of the consistency of painter's size; second, a sufficiency of pure clay to render it of the consistency of cream. Apply with a painter's brush.

HARD CEMENT FOR SEAMS.—Take equal quantities of white lead and white sand, and as much oil as will make it into the consistency of putty. Apply this to the seams in the roofs of houses, etc. It will, in a few weeks, become as hard as stone.

BLUE INK.—Take soft Prussian blue and oxalic acid in equal parts, powder them finely, and then add soft water to bring it to a thin paste. Let it stand for a few days, then add soft water to make the desired shade of color, adding a little gum arabic to prevent its spreading.

BEST RED INK.—Take best carmine (nakerot) 2 grains, rain water $\frac{1}{2}$ oz., water of ammonia 20 drops. This is a beautiful ruling ink for ledgers and bank purposes. Add a little gum arabic.

COLOGNE.—Take 1 gallon cologne spirits, 90 per cent. proof, add of the oil of lemon, orange and bergamot each a spoonful; add also extract of vanilla 40 drops; shake until the oils are out, then add a pint and a half of soft water.

LIQUID CEMENT.—Put gum shellac in 70 per cent. alcohol, put it in phials and it is ready for use. Apply it to the edge of the broken dish with a feather, and hold it in a spirit lamp as long as the cement will simmer, then join together evenly, and when cold the dish will break in another place first, and is as strong as new.

SUPERIOR WASHING SOAP.—Take 5 pounds bar soap, or 7 pounds good soft soap, 4 pounds sal-soda, 2 ozs. borax, 1 oz. hartshorn; to be dissolved in 22 quarts of water and boiled about fifteen minutes. For hard soap add to the above half a pound of rosin.

WOMAN IN THE GARDEN.

Much in these days is said about the sphere of woman. Of this vexed question we have nothing now to say. The culture of the soil, the body and the soul, are our themes. Rich soils, healthy bodies, pure, cultivated souls, these are what we are aiming at. And to this end we recommend that every country woman have a garden that she keeps and dresses with her own hand, or at least that she supervises and manages. The culture of strawberries, raspberries, blackberries, gooseberries, currants and garden vegetables is as delightful and profitable as anything in which woman can engage. She may sprinkle her garden well with flowers. All the better for that. A snowball in this corner, a rose in that, a dahlia bed there and a moss border here, will not be out of place. Only let the substantial and useful constitute the chief part. A touch of the ornate like a ribbon on a good bonnet is not in the least objectionable. In all the schools the girls study Botany. In all families the women ought to practice botany. It is healthful, pleasing and useful. The principles of horticulture are the principles of botany put into practice. Farmers study agriculture, why should not their wives and daughters study horticulture? If any employment is feminine, it would seem that this is. If any is healthy, this must be. If any is pleasurable, none can be more so than this. A rich bed of strawberries, a bush of blackberries or currants, a border of flowers produced by one's own hand, what can well afford a more rational satisfac-

tion? We say to all our country sisters, have a garden if it is only a small one, and do your best with it. Plant it with what pleases you best, with a good variety, and see what you can do with it. What woman cannot raise beets, tomatoes, melons, onion, lettuce and furnish her own table with them? What woman cannot plant a raspberry bush or currant, or gooseberry, and tend it well? Come, good women, study your health, your usefulness and happiness and your children's also.

1866. SORGO. 1866.

WE ARE NOW PREPARED TO FILL ORDERS for Sugar Cane Seed, from CHOICE LOTS (carefully selected by ourselves) of the BEST VARIETIES of

Pure Sorgo and Imphee Seed.

SEED CIRCULARS, containing Price List and Directions for Planting, sent FREE OF CHARGE.

NOW READY,

The Sorgo Hand Book for 1866,

Containing valuable information on the culture of Sorgo and the manufacture of SYRUP AND SUGAR therefrom; also, a full illustrated description of the celebrated

COOKS' EVAPORATOR,

And the

VICTOR CANE MILL,

Sent FREE OF CHARGE, on application to our address,

Blymyer, Bates & Day,

mar15-2t

MANSFIELD, O.

CHESTER White Pigs.

A few pair of Chester White Pigs for sale, boxed and shipped with the necessary food, at \$30 per pair. Also, 2 Chester White Boar Pigs for sale, four and five months old, at \$20 each.

Address,
NORMAN J. COLMAN,
ST. LOUIS, MO.

IVE'S SEEDLING CUTTINGS,

For Sale by

JOHN PAUL SACKSTEDER,

mar15-2t

Louisville, Ky.

THE ST. LOUIS RASPBERRY

Is the best Red Raspberry in cultivation in this vicinity; is perfectly hardy; stood the winter of 63-4 without protection uninjured; is very productive, and immediately succeeds the Doolittle Imp. Black Cap in ripening. Strong plants at \$2 per doz., \$10 per 100.

STRAWBERRY PLANTS:

Wilson's Albany and Triomphe De Gand at \$6 per 1000, Baltimore Scarlet early and very productive at \$10 per 1000. Address, E. A. RIEHL, Alton, Ill. mar15-3t

YOUNG EVERGREENS,

In great variety, both Nursery-grown and from the Forest, at \$5 per 1000 and upwards. Printed directions to purchasers. Price Lists on application.

JOHN C. TEAS, Raysville, Ind.

Also, CHERRIES, ROSES, GRAPES, MAHALEBS, and a general assortment of TREES, SHRUBS, PLANTS, &c.

N. J. COLMAN'S

SAINT LOUIS NURSERY!

On the Olive Street Road, 5 miles West of the Court House.

It contains the largest and choicest stock of

Home Grown

FRUIT TREES,

Shade Trees, Ornamental Shrubs,

Evergreens,

Grape Vines,

SMALL FRUITS, ETC.,

IN THE WEST.

The varieties are all guaranteed to be adapted to our soil and climate.

The City Office of the Nursery is at 97 Cheanut St., in the Office of "COLMAN'S RURAL WORLD."

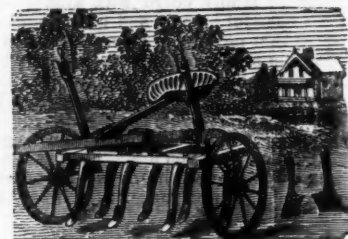
Address, NORMAN J. COLMAN,
St. Louis, Mo.

Osage Orange Plants. 100,000

Prime Osage Orange Plants, which made a growth of 3 to 4 feet from the seed.

Price from \$6 to \$10 per thousand, according to quantity taken. Also all other kinds of nursery stock at low prices. BROWN & LONG, 1t2* Monmouth, Warren Co., Ill.

IMPORTANT to Planters.



SMALL CORN PLOW AND CULTIVATOR COMBINED.

For Corn, Cotton, Tobacco and Other Crops.

FIVE Implements in one. It a perfect FURREUR, COVERER, HOER, HILLER AND HARROW. A Boy can manage it with ease. Hoes two rows at once. Driver rides. NO USE FOR THE HAND HOE WHEN THIS IMPLEMENT is used.

BRANCH BEAM HILLING PLOW. No Planter should be without this simple DOUBLE MOULD BOARD PLOW. Has moveable wings to suit rows from 2½ to 3½ feet apart. The best one Horse Cotton Plow in use.

Columbian Mowing and Reaping Machine.

This machine mows, reaps, and rakes.

AGENTS WANTED. Illustrated Circulars furnished upon application.

DUANE H. NASH, GEN'L AGENT,
AMERICAN AGRICULTURAL WORKS,
mar15-4t 17 Courtlandt St. New York.

OSAGE ORANGE PLANTS—1,500 strong
Osage Orange plants, two years old, for sale
very low. Apply immediately to
HENRY MICHEL, 56 North Second St.,
St. Louis, Mo.

LILY OF THE VALLEY—Plants by mail,
\$1.50 per doz., postage prepaid. Also, JAPAN
LILIES, at 75 cts. each, \$5.50 per doz., post-
age prepaid. Address, HENRY MICHEL,
56 North 2d St., St. Louis, Mo.

DR. WHITTIER,

Longer located in St. Louis than any
other Chronic Disease Physician. Office 65 St.
Charles St., one square south of Lindell Hotel, Saint
Louis. All Chronic, Virulent and Special Diseases
treated. Hours, 8 A.M. to 8 P.M. Confidential con-
sultation free of charge. Call at office and receive
Theory of Disease free. Communications by mail
promptly answered. My Theory of all such diseases
sent free for two 3 cent stamps. [aply]

BAROMETERS & THERMOMETERS.

I wish to announce to my friends and the readers
of the "World" in particular, that I have just received
a lot of the above-named instruments. A barom-
eter is an indispensable article in every household, es-
pecially to the farmer, as it indicates the exact change
in weather—and if he only knew the usefulness of the
instrument, he would not hesitate to pay a small sum
for an article that will save hundreds of dollars.

Price, from \$10 to \$25. No. 114 Market St.,
aply*30 JACOB BLATTNER, OPTICIAN.

Wilson's Albany Strawberry

PLANTS.—125,000 Wilson's Albany Strawberry
plants, at \$6 per 1000. 30,000 Lawton Blackberry
plants, at \$30 per 1000. Also, Concord, Hartford
Prolific, and Norton's Virginia Grape Vines.
Persons residing where there is an express office,
can order plants of me and pay for them on delivery
by the express company. Address, Jno. S. SEYMOUR,
Eureka, St. Louis Co., Mo.

GREAT CHANCE TO MAKE MONEY.

Experienced agents, school teachers and returned
and disabled officers and soldiers, and all energetic
young men

WANTED

to canvass for the Standard History of the War com-
plete in one very large volume of over 1000 pages, and
splendidly illustrated with over 150 fine portraits of
noted Generals, Battle Scenes, Maps and Diagrams.
Published in both English and German. This work
has no rival as a candid, lucid, complete, authentic
and reliable history of the great conflict, the author
having confined himself strictly to official data, de-
rived from the reports of Northern and Southern Gen-
erals, the report of the Committee on the Conduct of
the War, National and Rebel Archives, etc., etc.
The great superiority of this work over all others is
everywhere acknowledged. Agents can clear \$250
per month. Send at once for circulars and see our
terms. Address, ZEIGLER, McCURDY & CO.,
No. 6 North Fifth street, St. Louis, Mo.

March 1-2t

ESTABLISHED 1849.

The following Catalogues are now ready, and will be mailed
to all applicants.

No. 1
Descriptive
List of
Greenhouse
and Bedding
Plants, Roses
Shrubs,
Grape
Vines,
Small Fruits,
&c. &c.



No. 3, Descriptive Catalogue of DAHLIAS, consisting of upwards
of Two Hundred Distinct Varieties.

A liberal Discount allowed to the trade: Send for Catalogue. Address,
HENRY MICHEL, 56 North Second Street, Saint Louis, Mo.,
with Wm. Koswig & Co., Western Agricultural Warehouse and Seed Store.

Mar 1-4t

Osage Orange Seed

From Texas.

We are prepared to furnish a good article of seed,
gathered last fall in Texas under our own supervision,
at the following prices—

Any quantity less than 1 bushel, \$2 per lb.
From 1 bush. to 5 bushels, \$50 per bush.
5 bush. to 10 bushels, \$45 per bush.
10 bush. and over, \$40 per bush.

Terms—Cash, with order.

Address, OVERMAN, MANN & CO.,
Box 100, Normal, Ills., or 600 Bloomington, Ills.
feb4t

GRAPE VINES & SMALL FRUIT PLANTS.

FOR SALE IN LARGE OR SMALL QUANTITIES.

Send for Price List.

E. R. MASON & SON,

Webster Groves, St. Louis Co., Mo.

[Nov. 1-6m.]



NANSEMOND Sweet Potatoes for Seed.

Price, \$6 per single bushel. \$15 per
barrel of three bushels. Also,
plants in proper season. This va-
riety is successfully grown at the
North. Send for Circular of direc-
tions, etc. Address,
MURRAY & CO.,
Fosters Crossings, Warren Co.
mar 1-3t Ohio.

For Sale, Short Horn Cattle,
South-down and Cotswold Sheep,
at our farm, near Lexington, Ky. Catalogues
sent on application. WM. & BEN WARFIELD.

Marl-6t

RED CEDAR SEEDLINGS.

We will have for sale in spring of 1866, one mil-
lion of above plants at the following low prices:

RED CEDAR—4 to 6 inches, \$6 3/4 1000
" " 6 to 12 inches, 10 3/4 1000
" " 12 to 20 inches, 20 3/4 1000
" " 1 1/2 to 2 feet, 5 3/4 100
RED ELM—1 to 2 feet 10 3/4 1000

Early orders and correspondence respectfully solicited.

Address, JOHN M. HUNTER,
marl-2t Ashley, Washington Co., Ill.

250,000 Concord Grape Cuttings

For sale.

100,000 Cuttings of other varieties.

Dr. H. Schroeder,

Bloomington, Ills.

tf

100,000

Concord Grape Vines for sale.

100,000

Catawba Grape Vines for sale.

10,000

Hartford Prolific Grape Vines for
sale.

10,000

Delaware Grape Vines for sale.

5,000

Norton's Virginia Grape Vines for
sale.

50,000

Grape Vines of Clinton, Heribmont, Taylor,
Cynthiana, Perkins, Maxatawny, Cassady,
Iona, Rebecca, Israella, Adirondac, and many
others, at a reasonable price for sale.

Also, Strawberry Plants, Currants, Raspber-
ries, &c. Send stamp for price list, to

Dr. H. Schroeder,

Bloomington, Ills.

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T. M. BARRON & CO.,

Forwarding and Commission Merchants, No. 71 North
Second Street, St. Louis, Mo. Consignments of all
kinds of farm produce solicited. Purchases of seeds,
implements and supplies made to order. Respectfully
refer to N. J. Colman, Editor of this Journal.

Sugar Cane

SEED.

Absolutely Pure.

Realizing the importance of providing our patrons
and the trade with good and reliable Cane Seed of
all the prominent varieties, we have, during the past
season, given especial attention to this subject, and
are now able to furnish supplies of seed in large and
small quantities, of most undoubted excellence and
purity. Our stock comprises—

REGULAR SORGO, or the original Chinese
Cane.

EARLY SORGO, smaller, and some weeks
earlier than the Regular, though not so
productive.

LIBERIAN, a new and very popular variety:
does not blow down.

OOMSEEANA, sometimes called Otahetan.
Best for Sugar.

NEEAZANA, or White Imphee, a short, stout
cane, stands up well, and generally liked.

The cane from which the above seed was produced,
was grown and the seed harvested and cured under
our immediate observation. The seed is all true to
the varieties designated, and absolutely free from
admixture with base and worthless canes.

The cane from which the seed was produced yielded
from two to three hundred gallons of syrup per acre.

PRICES.

REGULAR SORGO—by mail, 40 cts. per lb.; by
express, 25 lbs. or less, 25 cts. per lb.; over 25 lbs.,
15 cts. per lb.

LIBERIAN, OOMSEEANA, NEEAZANA, and
EARLY SORGO—by mail 50 cts. per lb.; by ex-
press, 25 lbs. or less, 30 cts. per lb.; over 25 lbs.,
25 cts. per lb. Package included.

Two to three lbs. required per acre.

CLARK SORGO MACHINE CO.,

Cincinnati, Ohio.

Manufacturers of Sorgo Machinery, Drag Saws,
Bells, Corn Crushers, &c. Sorgo Hand Book and
specimen copy of the Sorgo Journal sent FREE.
feb15-St

Native Evergreens of the follow-
ing varieties, 5 to 12 inches high.

BALSAM FIR,

ARBOR VITE, WHITE PINE, SPRUCE AND

HEMLOCK, at \$7 per 1000. \$25 for 5,000. Packing
free. JAS. A. ROOT, Skaneateles, N. Y.

Mar 15-2t

Western Agricultural Depot and Seed Store.

WM. KOENIG & CO.,

No. 56 North Second St., above Pine, St. Louis, Mo.

Dealers in

Landreth's Celebrated Garden

SEEDS.

Brown's Improved Illinois Corn Planter,

Greatly Improved for the Spring of 1886.

The celebrated Hawkeye Corn Cultivator,

The best cultivator in the Western Country.

Aultman, Miller & Co.'s Buckeye Mower—and Reaper and Mower combined—with the best Self-Rake ever got up.

Deere & Co.'s celebrated Moline Plows,

Extra hardened, and with slip share.

And Agricultural Implements and Seeds in General.

Send for Circulars.

Lyon's Periodical Drops.

THE GREAT FEMALE REMEDY FOR
IRREGULARITIES.

These drops are a scientifically compounded fluid preparation, and better than any Pills, Powders, or Nostrums. Being liquid, their action is direct and positive, rendering them a reliable, speedy and certain specific for the cure of all obstructions and suppressions of nature. Their popularity is indicated by the fact that over 100,000 bottles are annually sold and consumed by the ladies of the United States, every one of whom speak in the strongest terms of praise of their great merits. They are rapidly taking the place of every other Female Remedy, and are considered by all who know aught of them, as the surest, safest and most infallible preparation in the world, for the cure of all female complaints, the removal of all obstructions of nature, and the promotion of health, regularity and strength. Explicit directions stating when they may be used, and explaining when and why they should not, nor could not be used without producing effects contrary to nature's chosen laws, will be found carefully folded around each bottle, with the written signature of JOHN L. LYON, without which none are genuine.

Prepared by Dr. JOHN L. LYON, 195 Chapel St., New Haven, Conn., who can be consulted either personally or by mail (enclosing stamp), concerning all private diseases and female weakness. Price \$1.50 per bottle. Sold by druggists everywhere.

C. G. CLARK & CO.,

Gen'l Agents for U.S. and Canada.

COLLINS Bro's, Wholesale Agents, St. Louis.

Decl-1y

PRAIRIE FARMERS may learn much to their advantage, about **TIMBER**, from a **DESCRIPTIVE PAMPHLET** of the best rapid growing

Forest Ornamental Trees, Shrubs and Hedges,

That may be readily raised from **SEED**, if sown in **WINTER** or **EARLY SPRING**, with directions how to grow them, and where to get the seed.

Address, enclosing 2 stamps, **H. WILBUR,**
Feb 15-87 Kalamazoo, Mich.

Western States Agricultural Company.

L. J. BUSH & CO.,

Manufacturers' Agents and Dealers
in all kinds of

AGRICULTURAL

MACHINERY,

Dodge's Patent Iron Reaper and Mower, formerly "Ohio and Buckeye."

Threshers and Separators, Horse Powers, Portable Steam Engines,

Sugar Mills and Evaporators, Farm and Freight Wagons, Plows, Cultivators and other Farm Machinery.

Heavy Freight Wagons made to order on short notice.

We are prepared to receive on consignment, and sell, all kinds of produce, and to purchase to order any goods that may be required for farm or plantation use. Our facilities enable us to purchase on the **BEST** terms, and our charges will be moderate.

OFFICE AND WAREHOUSE:

NO. 14 SOUTH MAIN ST.

Opposite Merchants' Exchange,

Feb 3m

ST. LOUIS, MO.

GREAT DISTRIBUTION

By the Eureka Gift Association, Established 1846

180 Broadway, New York.

Rosewood Pianos, Melodeons, Fine Oil Paintings, Engravings, Silver Ware, Fine Gold and Silver Watches, Diamond Pins, Diamond Rings, Gold Bracelets, Coral Florentine, Mosaic, Jet, Lava and Cameo Ladies' Sets, Gold Pens with Gold and Silver Extension Holders, Sleeve Buttons, Sets of Studs, Vest and Neck Chains, Gold Rings, &c. Valued at One Million Dollars.

DISTRIBUTION is made in the following manner: CERTIFICATES naming each article and its VALUE, are placed in SEALED ENVELOPES, which are well mixed. One of these Envelopes, containing the Certificate or Order for some Article, will be delivered at our office, or sent by mail to any address, without regard to choice, on receipt of 25 Cents.

On receiving the Certificate the purchaser will see what Article it draws, and its value, and can then send ONE DOLLAR and receive the Article named, or can choose ANY OTHER one Article on our List of the same value.

Purchasers of our SEALED ENVELOPES, may, in this manner, obtain an Article Worth FROM ONE TO FIVE HUNDRED DOLLARS, for ONE DOLLAR, which they need not pay until it is known what is drawn and its value. Entire Satisfaction Guaranteed in all Cases.

THE EUREKA GIFT ASSOCIATION would call attention to the fact of its being the Original and Largest Gift Association in the country. We are therefore enabled to send FINER GOODS, and give better chances to obtain the MORE VALUABLE PRIZES, than any other establishment of the kind. The business continues to be conducted, in a fair and honorable manner, and a large and greatly increasing trade is proof that our patrons appreciate this method of obtaining rich and elegant goods.

During the past year this Association has sent a very large number of valuable prizes to all parts of the country. Those who patronize us will receive the full value of their money, as no article on our list is worth less than \$1, retail, and there are no blanks. Parties dealing with us may depend on having prompt returns, and the article drawn will be immediately sent to any address by return mail or express.

The following parties have recently drawn valuable prizes from the Eureka Association and have kindly allowed the use of their names, many other names might be published were we permitted:—

Andrew Wilson, Custom House, Philadelphia, Penn., Oil Painting, value, \$100; James Hargraves, 821 Broadway, New York, Oil Painting, value, \$100; E. F. Jones, Barrett, Marshall Co., Kansas, Melodeon, value, \$200; Patrick J. Byrnes, Waterbury, Ct., Gold Watch, value, \$125; J. F. Shaw, 224 East 24th street, N. Y., Piano, value, \$350; Mrs. Chas J. Nevis, Elmira, N. Y., Piano, value, \$300; Miss Lucy Janeway, Elmira, N. Y., Cluster Diamond Ring, value, \$200; Mrs. E. Pennoyer, City Hotel, Nashville, Tenn., Melodeon, value, \$125; Oscar M. Allen, Co B, 142d Ind Vols, Nashville, Tenn., Watch, val., \$85; Rowland S. Patterson, Co D, 10th Iowa Vol Vols, Oil Painting, val., \$100; Mrs. Abbey J. Parsons, Springfield, Mass, Melodeon, val., \$150; James L. Dexter, City Surveyor, Syracuse, N. Y., Gold Watch, val., \$150; Mrs. Jas Ely, 177 Wooster st., cor Bleeker, N. Y., Oil Painting, val., \$100; Mrs J. C. Coles, Grand Rapids, Mich., Silver Castor, val., \$40; Dr. J. R. Sinclair, No 4 Main st, Utica, N. Y., Framed Engraving, val., \$25; Hon Luther Detmold, Washington, D.C., Oil Painting, val., \$100; Dr J. R. Marsh, 146 Chesnut st, Phila, Pa, Piano, val., \$300; Col S.M. Robertson, St. Charles Hotel, N.O., La., Oil Painting, val., \$100; Mrs Lucy Adams, Detroit, Mich, Gold Watch, val., \$150; Pat'k Burk, 121 Chapel st, N. Haven, Ct, Melodeon, val., \$200; Jesse R. Williams, Springfield, Mass, Gold Watch, val., \$150; Mrs M. N. Roberts, Revere House, Boston, Mass, Piano, val., \$350; Hon Nelson J. White, Washington, D.C., Oil Painting, val., \$100; Luther Brown, 25 Pleasant st, Fall River, Mass, Gold Watch, val., \$150; Mrs J. Phillips, Worcester, Mass, Melodeon, val., \$200; J. S. Brown, Westfield, Mass, Gold Watch, value, \$125; Miss E. Davis, Natick, Mass, two prizes, Melodeon, value, \$225, Cluster Diamond Ring, value, \$200.

A Chance to obtain any of the above Articles for One Dollar by purchasing a Sealed Envelope for Twenty-Five cents.

Five Sealed Envelopes will be sent for \$1; Eleven for \$2; Thirty for \$5; Sixty-five for \$10; One Hundred for \$15. Agents Wanted Everywhere.

Our patrons are desired to send United States money when it is convenient. Long letters are unnecessary. Orders for Sealed Envelopes must in every case be accompanied by the Cash, with the name of the person sending, and Town, County and State plainly written. Letters should be addressed to the Managers, as follows.

GOODWIN, HUNT & CO.,
Box 5706 Post Office, New York.

GEO. HUSMANN. C. C. MANWARING.
HERMANN NURSERY.
 HUSMANN & MANWARING, Proprietors,
 HERMANN, MO.

Having much increased our business, we take pleasure in calling the attention of our friends, and the public generally, to our large and complete assortment of Fruit and Ornamental Trees and Shrubs comprising the choicest varieties of
 Apples, Pears, standard and dwarf; Cherries, standard and dwarf; Peaches, Plums, Apricots, Almonds, Quinces, Grapes, Currants, Gooseberries, Raspberries, Strawberries, Blackberries, Shade and Ornamental Trees and Shrubs, Evergreens, Vines and Creepers, Roses, Dahlias, and other Plants, Scions of Fruit Trees, Cuttings and Seedlings of Ornamental Trees, Shrubs, &c.

Most of the varieties were tested here, and have proved successful in our soil and climate, and all are warranted true to name.

We would call the special attention of Grape Growers to our large assortment of native hardy grapes, comprising over sixty of the choicest varieties, which we have spared no pains nor cost to procure from the most reliable sources. Many of them have been tested here, and all will be tested in the open vineyard, and we shall recommend none until we have found them successful. This we may now confidently do with Norton's Virginia, Herbmont, Missouri and Concord, they having been tested beyond a doubt.

Descriptive Catalogues sent gratis to all applicants. Orders directed to us personally or to our local agents, will be promptly and carefully filled.

HUSMANN & MANWARING.

Hermann, Sept. 1859.

Itch! Itch! Itch!

Scratch! Scratch! Scratch!

Wheaton's Ointment



Will Cure the Itch in 48 hours

It cures the Prairie Itch, Wabash Scratches, Salt Rheum, Ulcers, Chilblains, and all Eruptions of the Skin. Price 50 cents.

Beware of Lotions and Washes which will not remove the disease. By sending 60 cents to COLLINS

BRO'S, (Agents for the South-west,) S.W. Corner of 2d and Vine Sts., Saint Louis, Mo., it will be forwarded by mail, free of postage, to any part of the country. WEEKS & POTTER, Boston, Mass., Proprietors Oct15-6m

FRUIT AND ORNAMENTAL TREES.

Vines, Flowering Shrubs, etc., grown and for sale at the

COAL CREEK VINEYARD & NURSERY.

Send for Descriptive Catalogue.

BARNES & KELLY,

(nov156m) Lawrence, Kan.

30,000 FIRST CLASS APPLE

Trees for sale, comprising all of

THE LEADING WESTERN VARIETIES,

at \$15 per hundred, \$100 per thousand.

BAYLES & BRO.,

Jan1-6t Carondelet, Mo.

LAND PLASTER

By the Barrel.

Rhodes' Superphosphate.

PLANT & BRO.,

25 North Main St., Louis, Mo.

OSAGE ORANGE SEED.

We are in receipt of Fresh Seed from Texas, which we offer by the lb. or bushel, at the lowest market rates, and would advise those in want of seed to address before buying elsewhere.

PLANT & BRO.,

St. Louis, Mo.

St. Louis Agricultural Warehouse and Seed Store,

[Established 1845, by Wm. M. Plant.]

SIGN OF THE GILT PLOW.

NO. 25 NORTH MAIN STREET,

BETWEEN CHESNUT AND PINE STS.,

Also, No. 203 NORTH FOURTH STREET (Fronting on two streets), & 204 BROADWAY, SAINT LOUIS, MO.

Plant & Brother,

WM. M. PLANT.]

[ALFRED PLANT.

Wholesale and Retail Dealers in and Manufacturers' Agents for the Sale of

Agricultural Implements and Machines,

Leather and Rubber Belting, Hose, Steam Packing.

Howe's Standard Scales.

Pearce's Plantation Cotton Spinners.

WOOL CARDING MACHINES, COACH SCREWS, STORE TRUCKS, CISTERN, DEEP WELL, ENGINE AND CHAIN PUMPS, &C.

Krauser's Improved Portable Cider Mill and Press.

Sugar Cane Mills and Juice Evaporators.

Cotton Gins, Hand and Power Corn Shellers.

Smith's Patent Cast Cast-Steel Plow.

Young's and Tobey & Anderson's Peoria steel Plows.

STAFFORD'S 2-HORSE SULKY CULTIVATOR.

Selby's double check row CORN PLANTER.

McGaffey's Double-Check Row or Drill Corn Planter.

Kirby's American Iron Reaper and Mower.

Sulky and Revolving Horse Hay Rakes.

PALMER'S EXCELSIOR HORSE HAY HOISTING FORK.

Palmer's Revolving Hay Stacking Machine,

Also, a full supply of Warranted Fresh and Genuine

GARDEN, GRASS & OTHER SEEDS, growth of 1866.

All of which we offer at the lowest possible CASH PRICES.

Call and get Illustrated Catalogue furnished Gratis.

St. Louis, Mo., Feb. 1866.

PLANT & BRO.

Trees and Plants at Retail.

The subscriber begs to offer the following, together with almost everything else found in a nursery—all approved varieties and of best quality.

Apples, 2 and 3 year old, 20 to 25c.

Peaches, 25 and 30c.

Pears, dwarf 65c, standard 75c.

Cherries, 75c. Plums, 75c. Apricots and Quinces, 50c.

Grapes—Concord, Delaware, Hartford, Nortons' Virginia, Taylor's Bullit—50c each.

Strawberries—Wilson's Albany, Iowa, \$1.50 per 100.

Russell, Buffalo, French, Baltimore Scarlet, \$3 per 100.

Lawton Blackberry—\$1.50 per doz.

Raspberries—Doolittle's Black Cap, Purple Cane, St. Louis, \$1.50 per doz.

Currants—Red and White Dutch, \$1.50 per doz.

Houghton Seedling Gooseberry, \$1.50 per doz.

Deciduous Ornamental Trees—20 Fine varieties, 50c to \$1.00 each.

Shrubs—50 choice kinds, 75c.

Roses—over one hundred superb varieties, 50c to \$1 each.

Dahlias—over 70 varieties, 50c each.

Evergreen Trees and Shrubs, a splendid assortment, from 2 to 6 feet high, price from 50c to \$5 each.

Rhubarb, Asparagus, Potatoes, &c.

Address, Carew Sanders,

Carondelet, Mo.

Spring Garden Seeds.

J. M. THORBURN & CO.'S DESCRIPTIVE PRICED CATALOGUE,

For 1866,

Mailed to all applicants.

N.B.—NEW PEAR SEED by mail, \$4 3/4 lb.

J. M. THORBURN & CO.,

mar1-2t 15 John St., New York.

Seeds! Seeds! Seeds!

J. M. THORBURN & CO.'S

Annual Descriptive Catalogue of Vegetable and

Agricultural Seeds

For 1866,

With directions for the cultivation of Garden Vegetables, is ready for mailing to all applicants.

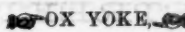

J. M. Thorburn & Co.,

Growers and Importers of Seeds,

feb-4t 15 John St., New York.

BARNUM & BRO.'S MISSOURI AGRICULTURAL WAREHOUSE AND SEED STORE,

No. 26 South Main Street, Saint Louis, Mo.

SIGN OF  OX YOKE,  hangs directly over the door, 3 doors north of Walnut Street,
WHOLESALE AND RETAIL DEALERS IN

AGRICULTURAL IMPLEMENTS AND MACHINES,
GARDEN, GRASS AND FIELD SEEDS.




Our Stock of Garden Seeds is Fresh and Pure, and will
be furnished in any quantity desired.

Champion of Ohio Reapers and Mowers.
Vandiver's Missouri Corn Planter
Buckeye Sulky Corn Plow.
Buckeye Cider Mill.
Buckeye Wheat Drill.

Exclusive Agents in St. Louis for Celebrated
Rock Island Plows.

Gang Plows.
Sulky Hay Rakes.
Hall, Brown & Co.'s Revolving Hay Rakes.
Cutting Boxes.
Washing Machines & Wringers.
Hay Hoisting Forks.
Threshers, Horse Powers, and Cotton Gins, and a vast variety of farming tools.

OUR GARDEN SEEDS are supplied IN PAPERS,
Neatly put up, with Directions for Cultivating, or in bulk. Merchants supplied with any size
boxes of assorted seeds desired.

 SEND FOR ILLUSTRATED CATALOGUE,
and Gardener's Almanac for 1866.

FREEMAN BARNUM,
ROBT C. BARNUM,

DISSOLUTION OF COPARTNERSHIP.

The copartnership heretofore existing under the firm of Blunden, Koenig & Co., is this day dissolved by limitation, Mr. James P. Blunden retiring. The remaining partners, Wm. Koenig and D.W. Mueller, will assume all liabilities, and sign the name of the firm in liquidation.

St. Louis, Mo., January 2, 1866.

JAMES P. BLUNDEN,
WM. KOENIG,
D. W. MUELLER.

Referring to the above notice, we have this day associated under the firm WM. KOENIG & CO., and shall continue the Seed and Agricultural business at the old stand, No. 56 North Second St. above Pine.

WM. KOENIG,
D. W. MUELLER.

Referring to the above notices, we take pleasure in stating, that we have appointed Messrs. WM. KOENIG & CO., SOLE AGENTS for our manufactured articles in St. Louis, Mo. Have arranged for a full stock being always kept on hand, where dealers may be supplied at liberal rates.

DEERE & CO.,

Manufacturers of the Celebrated Moline Plows and Hawkeye Corn Cultivator.

AULTMAN, MILLER & CO.,

Manufacturers of the Celebrated Buckeye Reaper and Mower.

WHITELY, FASSLER & KELLY,

Manufacturers of the Celebrated Champion Cider Mill.

GEORGE W. BROWN,

Manufacturer of Brown's Illinois Corn Planter.

**The LAMB
KNITTING
MACHINE.**

"THE CROWNING TRIUMPH"

 KNITS A STOCKING
SUBSTANTIALLY
COMPLETE.

Knitting the Heel and Narrowing off the Toe
as it goes along.

IT SETS UP ITS OWN WORK;

KNITS ANY SIZE, from two loops, forming
a cord, up to its full capacity;

WIDENS AND NARROWS, by varying the
number of loops, and

Knits the Wide Single Flat Web

The Double Flat Web,

The Plain Ribbed Flat Web,
and the

Fancy Ribbed Flat Web,
With selvages.

No other machine in the
world can do any one
of these things!

IT KNITS

Shawls,

Hoods,

Nubias,

Jackets,

Breakfast Capes,

Sacks,

Skirts,

Undershirts,

Drawers,

Boy's Suits,

Children's Cloaks,

Snow Shoes,

Leggins,

Gloves,

Mittens,

And upwards of FORTY
Different Articles.

Knits a yard of plain work in TEN minutes
a pair of socks complete in half an hour.

For Families, Wool Growers, Manufacturers, Merchants, &c., it is the most money-making and labor-saving invention of the age. From 100 to 150 per cent. profit on every article it produces. Women are earning from \$15 to \$25 per week, knitting hosiery and staple and fancy worsted articles.

Every Machine warranted to work as represented.
For Circulars, address: with a stamp.

PRATT & CLARK,

No. 24 North 5th Street, St. Louis,
Missouri.

General Agents for the West and
South-west.